

SHEET INDEX

DESCRIPTION

	SHEET INDEX	
SHEET NO.	DESCRIPTION	WORK SCHEDULE
SIGNING	& STRIPING	
S1	SIGNING & STRIPING - REFLECTION DRIVE - BOP TO STA 18+00	SCHED A
S2	SIGNING & STRIPING - REFLECTION DRIVE - STA 18+00 TO EOP / IMAGE DRIVE - STA 41+00 TO EOP	SCHED A
S3	SIGNING & STRIPING	SCHED A
STORM	DRAIN SHEETS	
SD1	STORM DRAIN PLAN & PROFILE	SCHED B
SD2	STORM DRAIN PLAN & PROFILE	SCHED B
SD3	STORM DRAIN PLAN & PROFILE	SCHED B
SD4	STORM DRAIN PLAN & PROFILE	SCHED B
SD5	STORM DRAIN PLAN & PROFILE	SCHED B
SD6	STORM DRAIN DETAILS	SCHED B
SD7	STORM DRAIN DETAILS	SCHED B
SD8	STORM DRAIN DETAILS	SCHED B
SD9	STORM DRAIN DETAILS	SCHED B
SD10	STORM DRAIN SUMMARY TABLES	SCHED B
SD11	SETTLING BASIN SITE & GRADING PLAN	SCHED B
SD12	SETTLING BASIN TYPICAL SECTION & SUMMARY TABLES	SCHED B
SD13	CREEK DIVERSION PLAN	SCHED B
SD14	CREEK RECONSTRUCTION PLAN & PROFILE	SCHED B
SD15	CREEK RECONSTRUCTION TYPICAL SECTION	SCHED B
ILLUMIN	ATION SHEETS	·
11	ILLUMINATION IMPROVEMENTS - IMAGE DRIVE - BOP TO EOP / REFLECTION DRIVE - STA 10+02 TO 15+82	SCHED C
12	ILLUMINATION IMPROVEMENTS - REFLECTION DRIVE - STA 15+82 TO EOP	SCHED C
13	ILLUMINATION SCHEDULES	SCHED C
14	POWER ONE-LINE, PANEL SCHEDULE, AND CONTROL SCHEMATIC	SCHED C
HEAT T	RACE SHEETS	
E1	HEAT TRACE DEMOLITION PLAN	SCHED B
E2	HEAT TRACE REMODEL PLAN	SCHED B
E3	HEAT TRACE CONTROLS SCHEMATIC & DETAILS	SCHED B
E4	HEAT TRACE DETAILS	SCHED B
E5	MANHOLE HEAT TRACE DETAILS	SCHED B
E6	HEAT TRACE LOAD CENTER SCHEDULE & ONE-LINE	SCHED B

WORK SCHEDUL	VORK SCHEDULES									
А	ROADWAY IMPROVEMENTS									
В	DRAINAGE IMPROVEMENTS									
С	ILLUMINATION IMPROVEMENTS									

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STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					1
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ELECTRIC	JH	TK									1
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WORK

SCHEDULE







PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

SHEET INDEX

GRID SW1638, SW1738 SCALE HOR. N/A DATE JAN 2020 STATUS 95%

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY OF ANCHORAGE (MOA) STANDARD SPECIFICATIONS. DATED 2015. (HEREINAFTER REFERRED TO AS MASS). THE LATEST EDITION OF THE ANCHORAGE WATER AND WASTEWATER UTILITY (AWWU) DESIGN AND CONSTRUCTION PRACTICES MANUAL (DCPM) AND THE SPECIAL PROVISIONS.
- 2. THE LOCATION OF THE EXISTING FEATURES AND UTILITIES SHOWN IN THESE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES ENCOUNTERED AND RECORD THEIR LOCATION ON THE CONTRACT RECORD DRAWINGS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- 3. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS WHICH ARE NOT SPECIFICALLY INDICATED AS BEING PROVIDED BY THE OWNER IN THE SPECIAL PROVISIONS. THE PERMITS SHALL BE MAINTAINED ON THE PROJECT SITE. COPIES SHALL BE GIVEN TO THE ENGINEER.
- 4. ALL WORK IN CLOSE PROXIMITY TO EXISTING OVERHEAD TELEPHONE AND ELECTRIC UTILITIES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL STATUTES, CODES AND GUIDELINES AND THE CLEARANCE REQUIREMENTS OF THE SERVING UTILITY.
- 5. LIMITS OF ROADWAY EXCAVATION SHOWN ON THE DRAWINGS ARE APPROXIMATE. ACTUAL LIMITS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER DURING CONSTRUCTION OPERATIONS.
- 6. GEOTECHNICAL (SOILS) INFORMATION IS INCLUDED IN THE CONTRACT DOCUMENTS.
- 7. ALL WORK SHALL BE PERFORMED WITHIN PUBLIC RIGHT-OF-WAY, PUBLIC USE EASEMENT, SLOPE EASEMENT, TEMPORARY CONSTRUCTION EASEMENT, DRAINAGE EASEMENT, OR TEMPORARY CONSTRUCTION PERMIT AREAS. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION, UNLESS OTHERWISE NOTED. REVEGETATION SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- 8. CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO PRE-CONSTRUCTION CONDITIONS, UNLESS OTHERWISE DIRECTED BY ENGINEER. PAYMENT FOR RESTORING DISTURBED PROPERTY OUTSIDE OF IDENTIFIED CONSTRUCTION LIMITS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE. DISTURBED AREAS NOT BEING PAYED SHALL BE TOPSOILED AND SEEDED WITH SCHEDULE A SEEDING MIX UNLESS OTHERWISE NOTED.
- 9. PROJECT CLEARING AND GRUBBING LIMITS SHALL COINCIDE WITH THE LIMITS OF DISTURBANCE AS SHOWN ON THE DEMOLITION (B) SHEETS. CONTRACTOR SHALL OBTAIN APPROVAL OF THE CLEARING AND GRUBBING LIMITS BY THE ENGINEER PRIOR TO CLEARING AND GRUBBING, SEE SPECIFICATIONS FOR MORE INFORMATION.
- 10. SLOPE LIMITS SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE ACTUAL SLOPE LIMITS BASED ON PRECONSTRUCTION SURVEY DATA.
- 11. IN PREPARATION FOR AND IMMEDIATELY PRIOR TO PAVING, THE CONTRACTOR SHALL SAW CUT AND REMOVE ADDITIONAL PAVEMENT BEYOND THE INITIAL SAW CUT, A MINIMUM OF 1-FOOT ONTO UNDISTURBED ASPHALT. AT TRANSVERSE JOINTS FINAL SAW CUT LINE SHALL BE SKEWED 15' - 25' PER DETAIL 3, SHEET D3. TACK COAT SHALL BE APPLIED TO THE SAWN FACE OF ASPHALT PRIOR TO BEGINNING PAVING.
- 12. PAVEMENT CROSS SLOPE ON SIDE STREETS SHALL VARY AT INTERSECTIONS TO PROVIDE POSITIVE DRAINAGE. SEE ROADWAY (R) SHEETS FOR INTERSECTION LAYOUTS.
- 13. ALL WORK AND MATERIALS REQUIRED FOR REMOVING ANY LITTER OR DEBRIS CREATED BY CONSTRUCTION OPERATIONS WITHIN THE PROJECT LIMITS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT WILL BE MADE.
- 14. ALL ORGANIC MATERIAL SHALL BE REMOVED FROM THE SUBGRADE TO A DEPTH TO BE DETERMINED BY THE ENGINEER. NO ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL SHALL BE UTILIZED FOR BACKFILL.
- 15. THE CONTRACTOR SHALL SUBMIT RECORD SURVEY NOTES WITH THE RECORD DRAWINGS.
- 16. EXCAVATION SHALL BE MEASURED BY EXCAVATED CROSS-SECTION AND SHALL BE LIMITED TO THE PAY LIMITS IDENTIFIED IN THE TYPICAL CROSS SECTIONS, UNLESS ADDITIONAL EXCAVATION IS DIRECTED BY THE FNGINFFR.
- 17. THE PROJECT CENTERLINE STATIONING IS RIGHT-OF-WAY CENTERLINE PER SURVEY CONTROL DRAWINGS UNLESS OTHERWISE NOTED. SEE SURVEY CONTROL DRAWINGS FOR HORIZONTAL AND VERTICAL CONTROL
- 18. THE EASEMENTS AND TEMPORARY CONSTRUCTION PERMITS ACQUIRED FOR THIS PROJECT MAY HAVE RESTRICTIONS. SEE CONTRACT DOCUMENTS FOR RESTRICTIONS
- 19. ALL CURB LOCATIONS, RADIUS MEASUREMENTS AND ELEVATIONS ARE TO THE TOP BACK OF CURB (TBC) UNLESS OTHERWISE NOTED.
- 20. FURNISH AND INSTALL 4" PIPE INSULATION BOARD (R-20) BETWEEN THE STORM DRAIN IMPROVEMENTS AND THE WATER AND SEWER UTILITIES WHEN THE VERTICAL CLEARANCE IS LESS THAN THREE FEET. IF 18 INCHES OF VERTICAL SEPARATION BETWEEN WATER AND SEWER/STORM DRAINS CAN NOT BE MAINTAINED THEN WATER RELOCATION WILL BE REQUIRED WHEN DIRECTED BY THE ENGINEER. SEWER/STORM DRAIN PIPE JOINTS SHALL BE PLACED AT LEAST NINE (9) FEET FROM A WATER CROSSING.
- 21. EXISTING WATER AND SEWER SERVICE LINES ARE NOT SHOWN IN THE PROFILES UNLESS SPECIFICALLY CALLED OUT.
- 22. WATER RESULTING FROM THE CONTRACTOR'S DEWATERING EFFORT MAY NOT BE PUMPED OR OTHERWISE DIVERTED INTO EXISTING CREEKS. STORM DRAINS OR SANITARY SEWERS UNLESS REQUIRED PERMITS. INCLUDING, BUT NOT LIMITED TO. THE MUNICIPALITY OF ANCHORAGE STORM WATER PLAN REVIEW OFFICE. AWWU, AND THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION. ARE OBTAINED BY THE CONTRACTOR. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE ALLOWED TO DIVERT WATER FROM EXCAVATION ONTO ROADWAYS. THE CONTRACTOR SHALL PROVIDE DISPOSAL SITE FOR EXCESS WATER AND SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL PROVIDE COPIES OF PERMITS AND APPROVALS TO THE ENGINEER AND MOA ROW PERMIT OFFICE PRIOR TO BEGINNING DEWATERING. DEWATERING WORK SHALL BE IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED DEWATERING PLAN.
- 23. ALL CURB AND GUTTER SHALL BE PAID AS "P.C.C. CURB AND GUTTER (ALL TYPES)".
- 24. EXISTING UTILITIES AND PROPOSED UTILITIES ARE SCHEMATICALLY SHOWN IN THE TYPICAL CROSS SECTIONS AND ARE AT AN ASSUMED APPROXIMATE LOCATION.
- 25. THE MATCH EXISTING ELEVATIONS AS SHOWN IN THE PLANS ARE APPROXIMATE. CONTRACTOR SHALL ADJUST PROPOSED GRADES AS REQUIRED TO MATCH INTO EXISTING ELEVATIONS PER THE DIRECTION OF THE FNGINFFR.
- 26. ALL FILL, USABLE EXCAVATION, PLACED NATIVE MATERIALS AND TRENCH BACKFILL SHALL BE COMPACTED TO NINETY-FIVE PERCENT (95%) OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT, PER MASS DIVISION 20 EARTHWORK, BASED ON MODIFIED PROCTOR TEST VALUES. ALL FILLS SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES, UNLESS OTHERWISE NOTED.
- 27. FIRE HYDRANTS WILL BE ADJUSTED TO FINAL GRADE BY AWWU O&M DIVISION ON A REIMBURSABLE BASIS. THE CONTRACTOR IS TO PROVIDE WRITTEN NOTICE TO THE ENGINEER A MINIMUM OF SEVEN (7) DAYS PRIOR TO THE NEED FOR FINAL FIRE HYDRANT ADJUSTMENT. THE WRITTEN NOTICE IS TO CONTAIN, AT A MINIMUM, THE MANUFACTURER AND MODEL NUMBER OF THE HYDRANT AND VERTICAL ADJUSTMENT NEEDED IN SIX (6") INCREMENTS.
- 28. UNLESS OTHERWISE NOTED, ALL VALVE BOXES, CLEANOUTS, AND MANHOLES WITHIN THE CONSTRUCTION DISTURBANCE LIMITS SHALL BE ADJUSTED RELATIVE TO FINISH GRADE PER MASS OR THESE DRAWINGS.

	CALL BEFORE YOU DIG!!!
Alaska Digline, In States	c. wide

RECORD DRAWING . DATA PROVIDED BY: _ THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: ___ DATE: _ DATA TRANSFERRED BY: ____ TITLE: COMPANY: DATE: . BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR—PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: ___ COMPANY: DATE:

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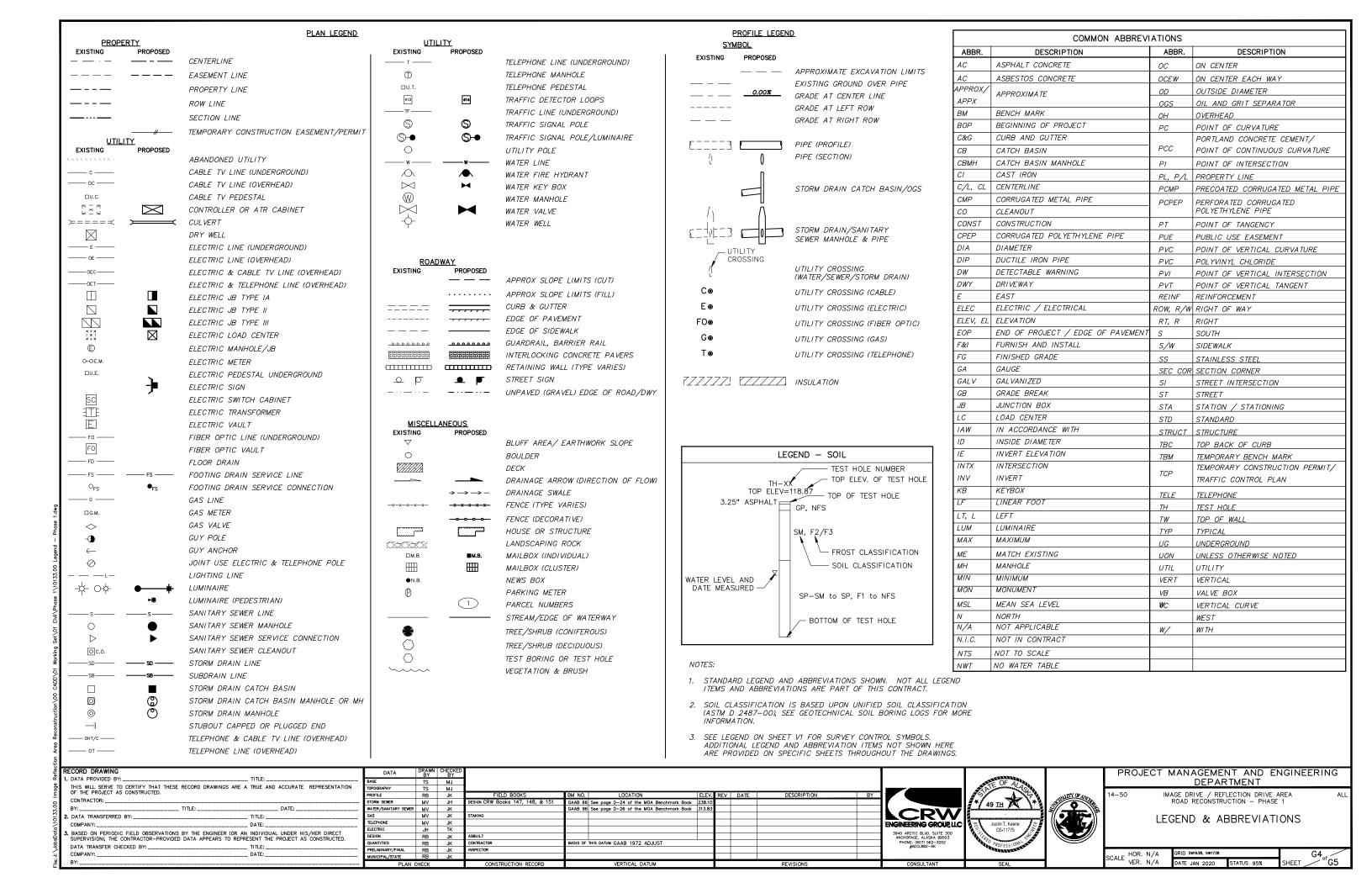


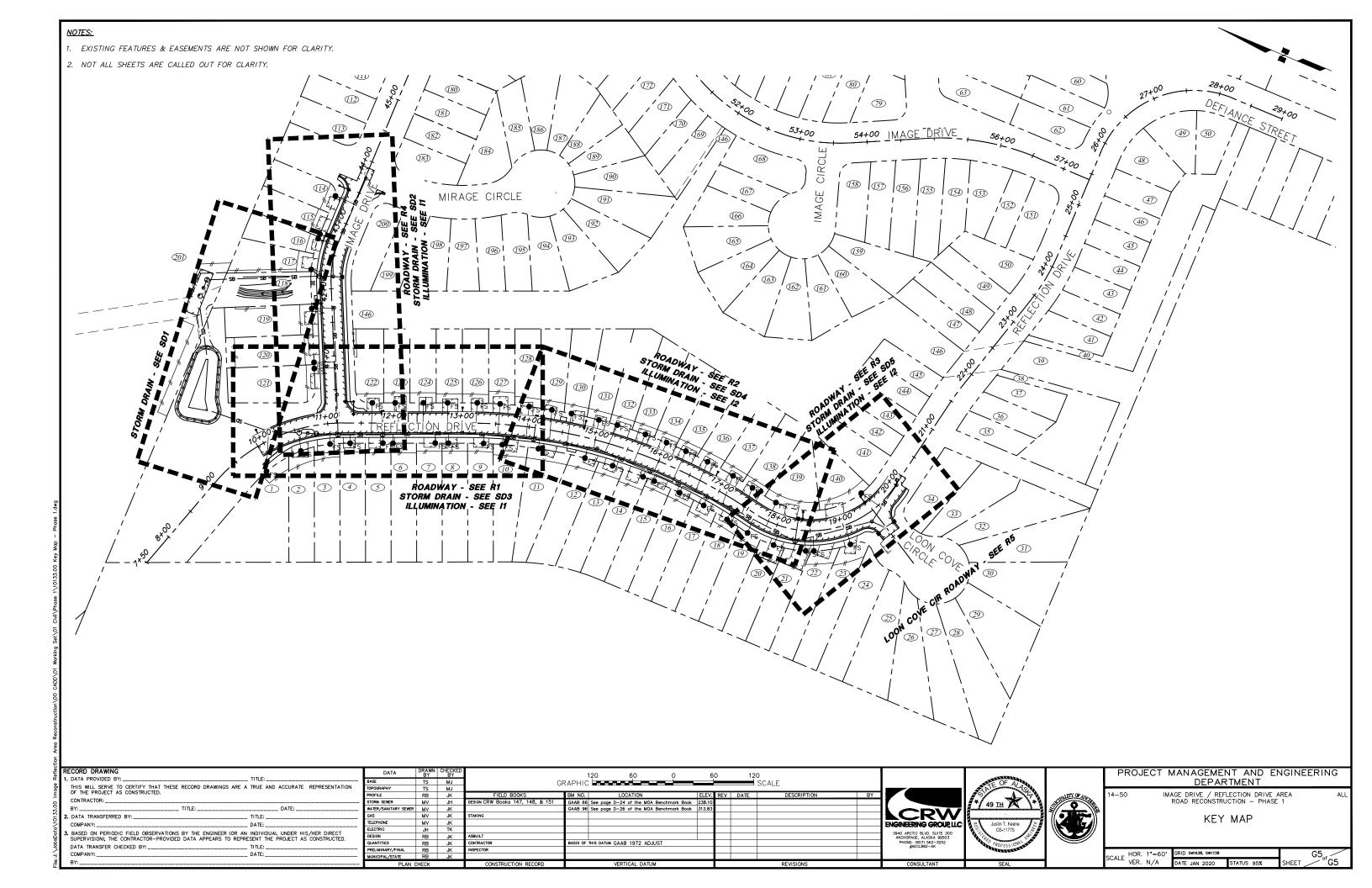
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1 4-50

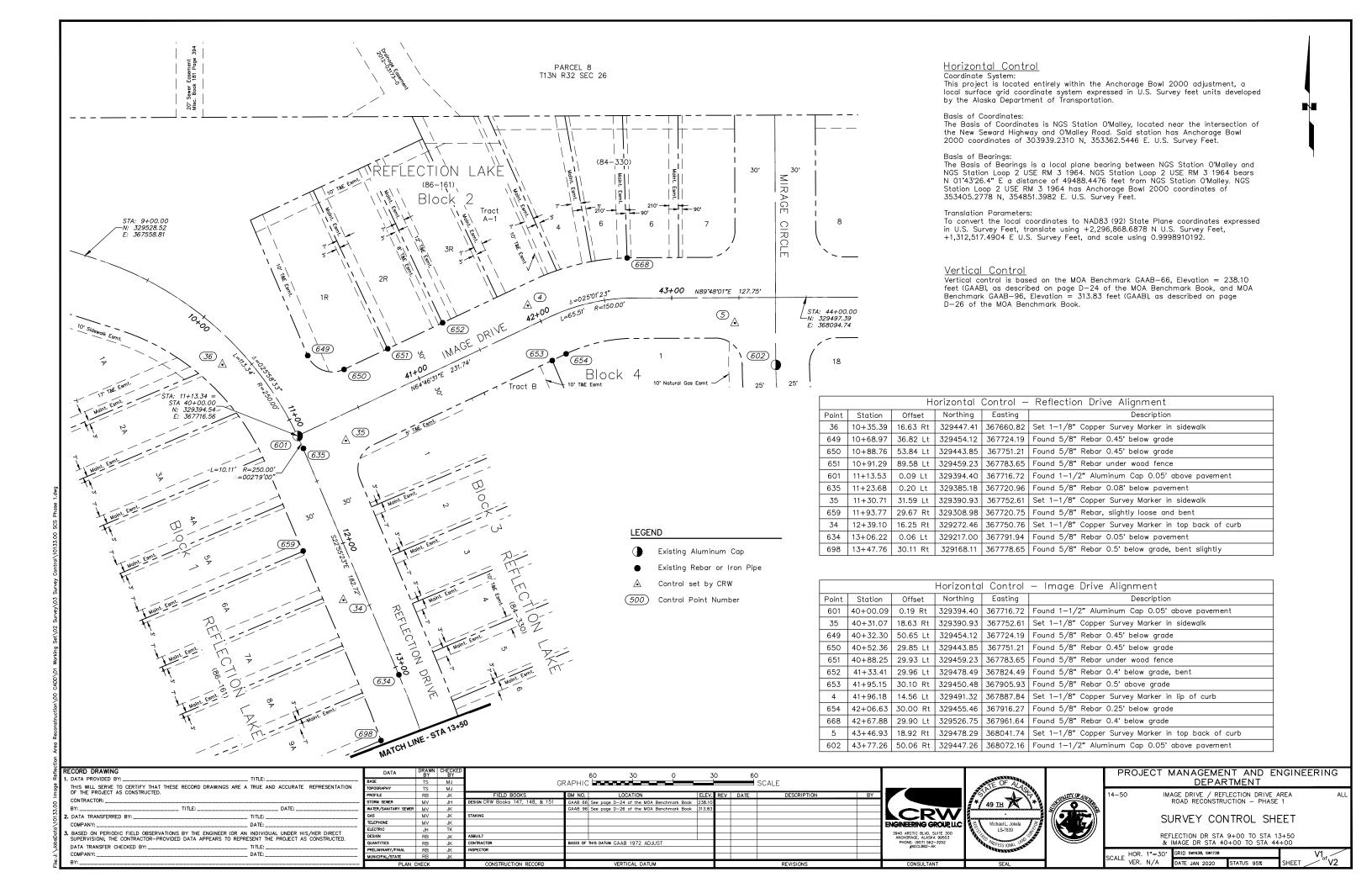
GENERAL NOTES

RID SW1638, SW1738 HOR. N/A

G3_{of} G5



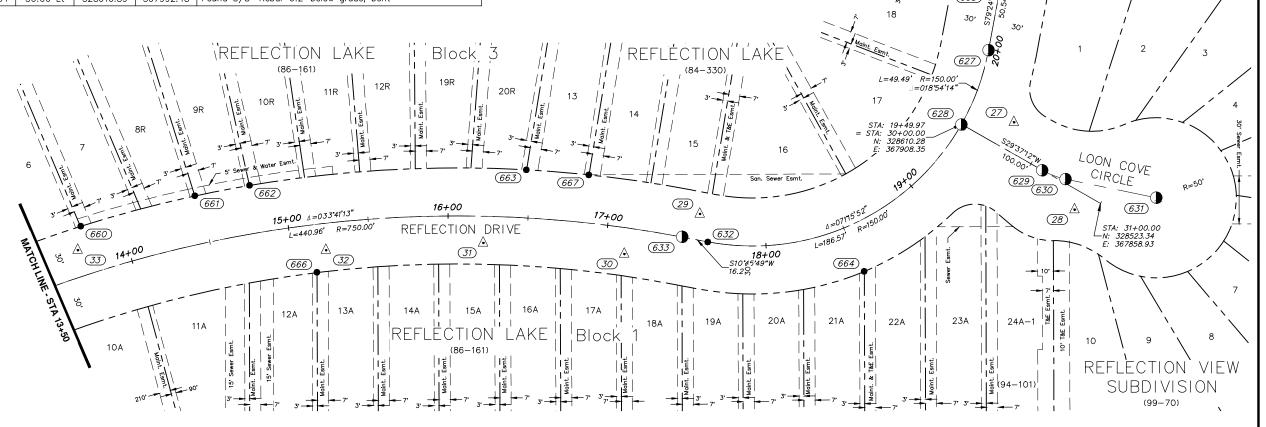






		Но	rizontal Co	ntrol - Re	eflection Drive Alignment
Point	Station	Offset	Northing	Easting	Description
33	13+69.88	16.34 Lt	329162.42	367829.69	Set 1—1/8" Copper Survey Marker in top back of curb
660	13+75.93	30.07 Lt	329160.69	367844.67	Found 5/8" Rebar 0.3' below grade
661	14+46.92	30.17 Lt	329089.38	367863.72	Found 5/8" Rebar 0.5' below grade
662	14+80.35	30.05 Lt	329055.21	367870.17	Found 5/8" Rebar 0.5' below grade
666	15+14.15	29.81 Rt	329013.10	367815.86	Found 5/8" Rebar 0.45' below grade
32	15+21.77	16.78 Rt	329007.29	367829.66	Set 1-1/8" Copper Survey Marker in sidewalk
31	16+22.45	16.72 Rt	328909.04	367834.19	Set 1-1/8" Copper Survey Marker in sidewalk
663	16+47.28	29.95 Lt	328882.23	367879.87	Found 5/8" Rebar 0.3' below grade, leaning slightly
667	16+84.94	29.92 Lt	328843.20	367876.71	Found 5/8" Rebar 0.2' below grade, slightly loose and bent
30	17+12.92	16.39 Rt	328820.90	367827.29	Set 1-1/8" Copper Survey Marker in top back of curb
633	17+47.11	0.15 Lt	328784.82	367838.04	Found 1—1/2" Aluminum Cap 0.15' below pavement
29	17+55.40	16.28 Lt	328773.66	367852.33	Set 1—1/8" Copper Survey Marker in top back of curb
632	17+63.39	0.08 Rt	328768.87	367834.78	Found 5/8" Rebar 0.1' below pavement
664	18+51.30	29.84 Rt	328671.11	367816.44	Found 5/8" Rebar 0.25' below grade
28	19+42.65	88.14 Rt	328539.53	367854.98	Set 1—1/8" Copper Survey Marker in top back of curb
629	19+49.78	58.02 Rt	328559.91	367879.56	Found 2" Aluminum Cap 0.05' above pavement
628	19+49.79	0.05 Rt	328610.32	367908.17	Found 2" Aluminum Cap 0.05' below pavement
630	19+51.42	73.44 Rt	328545.30	367874.08	Found 2" Aluminum Cap 0.05' above pavement
631	19+60.71	129.26 Rt	328488.56	367862.44	Found 2" Aluminum Cap 0.05' above pavement
27	19+64.45	28.87 Rt	328577.38	367909.55	Set 1—1/8" Copper Survey Marker in sidewalk
627	19+99.46	0.00 Rt	328593.39	367954.63	Found 1-1/2" Aluminum Cap 0.05' above pavement
665	20+32.34	30.06 Lt	328616.89	367992.48	Found 5/8" Rebar 0.2' below grade, bent

	Horizontal Control — Loon Cove Circle Alignment										
Point	Station	Offset	Northing	Easting	Description						
628	30+00.05	0.25 Rt	328610.32	367908.17	Found 2" Aluminum Cap 0.05' below pavement						
27	30+27.99	17.25 Lt	328577.38	367909.55	Set 1—1/8" Copper Survey Marker in sidewalk						
629	30+58.02	0.17 Rt	328559.91	367879.56	Found 2" Aluminum Cap 0.05' above pavement						
630	30+73.42	2.30 Lt	328545.3	367874.08	Found 2" Aluminum Cap 0.05' above pavement						
28	30+87.89	11.44 Rt	328539.53	367854.98	Set 1—1/8" Copper Survey Marker in top back of curb						



LEGEND

Existing Aluminum Cap

Existing Rebar or Iron Pipe

Control set by CRW

500 Control Point Number

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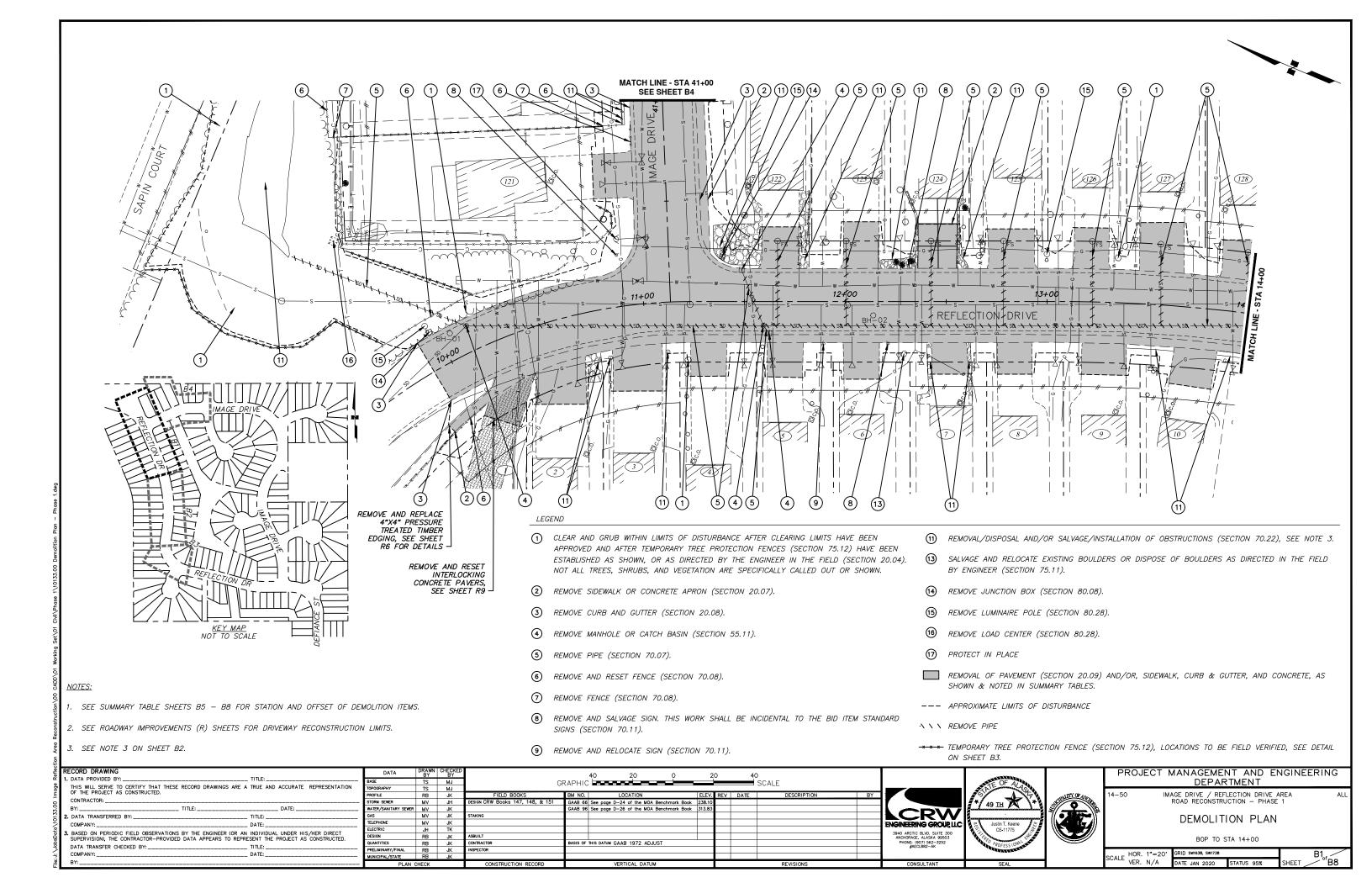


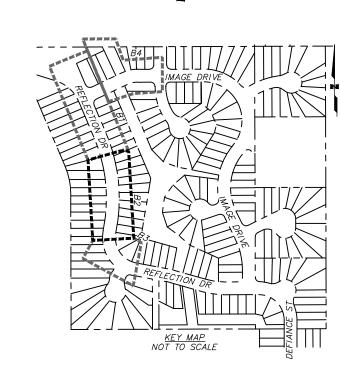
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

SURVEY CONTROL SHEET

	REFLECT							20+50	&	LOON	COVE	CIRCLE	
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NOTES:

- 1. SEE SUMMARY TABLE SHEETS B5 B8 FOR STATION AND OFFSET OF DEMOLITION ITEMS.
- 2. SEE ROADWAY IMPROVEMENTS (R) SHEETS FOR DRIVEWAY RECONSTRUCTION LIMITS.
- 3. EXISTING PRIVATE LANDSCAPING FEATURES SUCH AS RETAINING WALLS, TIMBERS, PLANTERS, LANDSCAPING ROCKS, ETC. ARE LOCATED IN THE ROW AND/OR ON PROPERTY WITHIN THE WORK ZONE. CONTRACTOR SHALL REMOVE ITEMS AS DESCRIBED IN THESE DEMOLITION PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD. NOT ALL OBSTRUCTIONS ARE SPECIFICALLY CALLED OUT OR SHOWN. IN EACH CASE, THE CONTRACTOR AND THE ENGINEER SHALL COORDINATE WITH PROPERTY OWNER. IF PROPERTY OWNER WISHES TO SALVAGE ITEMS THAT ARE CURRENTLY IN ROW AND NOT ALLOWED TO BE REINSTALLED THERE, CONTRACTOR SHALL PLACE ITEMS ON OWNER'S PROPERTY. IF OWNER DOES NOT WANT ITEMS PLACED ON PROPERTY, CONTRACTOR SHALL DISPOSE OF REMOVED ITEMS AT A CONTRACTOR—SUPPLIED LOCATION. MATERIALS TO BE REINSTALLED ON PROPERTY OR ALLOWED TO BE REINSTALLED IN THE ROW SHALL BE CAREFULLY REMOVED, PROTECTED AND STORED BY THE CONTRACTOR UNTIL READY TO BE REINSTALLED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE ENGINEER OF EXISTING DAMAGE TO ITEMS TO BE SALVAGED PRIOR TO REMOVAL. UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING PRIOR TO REMOVAL, IF ANY SALVAGED ITEMS ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THOSE ITEMS IN KIND INCLUDING MATCHING TYPE, COLOR, AND MANUFACTURER.
- CLEAR AND GRUB WITHIN LIMITS OF DISTURBANCE AFTER CLEARING LIMITS HAVE BEEN APPROVED AND AFTER TEMPORARY TREE PROTECTION FENCES (SECTION 75.12) HAVE BEEN ESTABLISHED AS SHOWN, OR AS DIRECTED BY THE ENGINEER IN THE FIELD (SECTION 20.04). NOT ALL TREES, SHRUBS, AND VEGETATION ARE SPECIFICALLY CALLED OUT OR SHOWN.
- 2 REMOVE SIDEWALK OR CONCRETE APRON (SECTION 20.07).
- (3) REMOVE CURB AND GUTTER (SECTION 20.08).
- (4) REMOVE MANHOLE OR CATCH BASIN (SECTION 55.11).
- (5) REMOVE PIPE (SECTION 70.07).
- (9) REMOVE AND RELOCATE SIGN (SECTION 70.11).
- 10) RELOCATE MAILBOX OR CLUSTER MAILBOX UNIT (SECTION 70.17).
- (1) REMOVAL/DISPOSAL AND/OR SALVAGE/INSTALLATION OF OBSTRUCTIONS (SECTION 70.22), SEE NOTE 3.
- 3 SALVAGE AND RELOCATE EXISTING BOULDERS OR DISPOSE OF BOULDERS AS DIRECTED IN THE FIELD BY ENGINEER (SECTION 75.11).
- (14) REMOVE JUNCTION BOX (SECTION 80.08).
- (15) REMOVE LUMINAIRE POLE (SECTION 80.28).

17) PROTECT IN PLACE

REMOVAL OF PAVEMENT (SECTION 20.09) AND/OR, SIDEWALK, CURB & GUTTER, AND CONCRETE, AS SHOWN & NOTED IN SUMMARY TABLES.

--- APPROXIMATE LIMITS OF DISTURBANCE

· \ \ REMOVE PIPE

*** TEMPORARY TREE PROTECTION FENCE (SECTION 75.12), LOCATIONS TO BE FIELD VERIFIED, SEE DETAIL ON SHEET B3.

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ER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					11
	MV	JK	STAKING								
EPHONE	MV	JK									ENG
CTRIC	JH	TK									
IGN	RB	JK	ASBUILT								, s
NTITIES	RB	JK	CONTRACTOR	BASIS OF	BASIS OF THIS DATUM GAAB 1972 ADJUST						1
LIMINARY/FINAL	RB	JK	INSPECTOR								1
IICIPAL/STATE	RB	JK									
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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

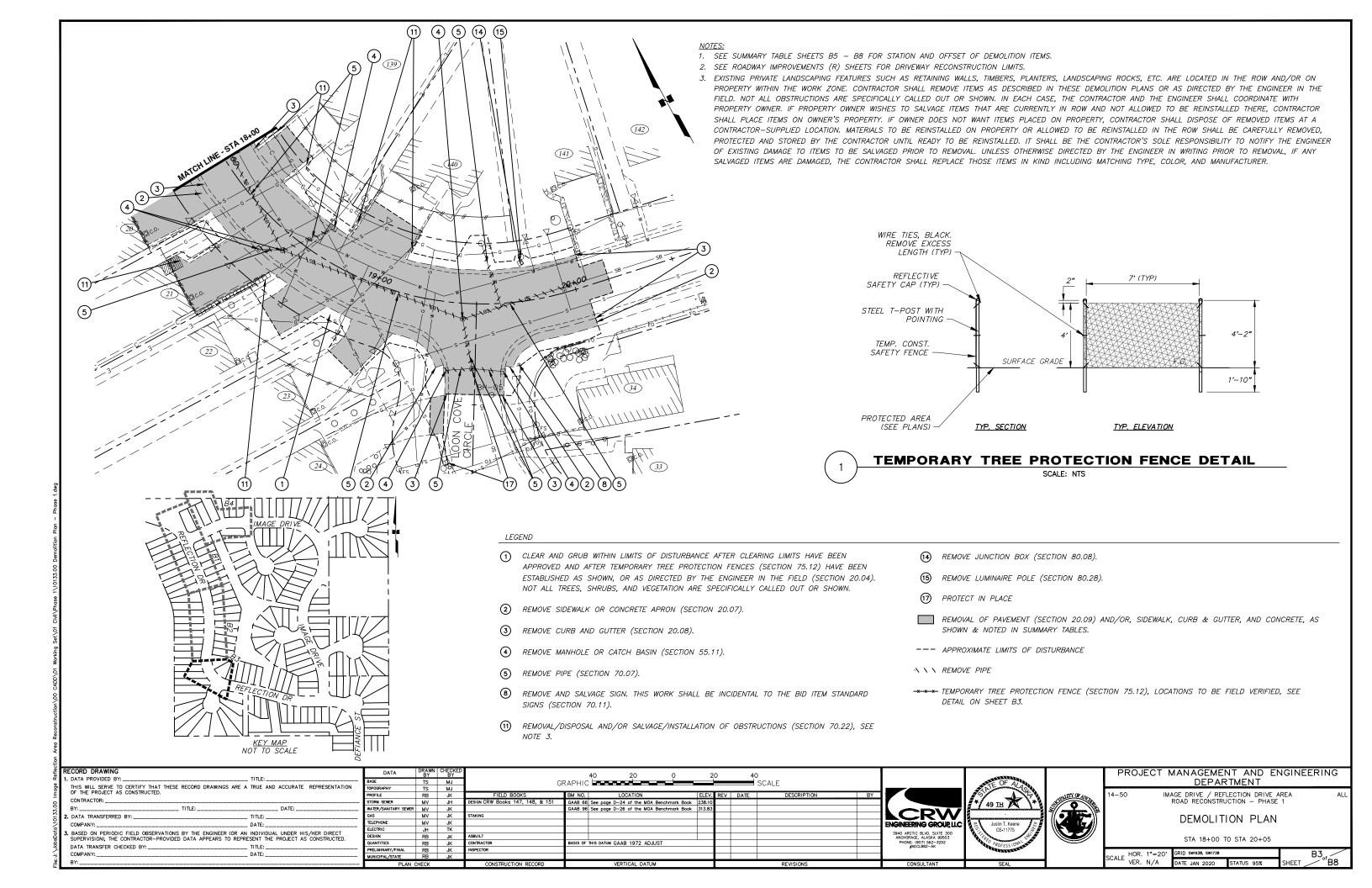
14-50 IMAGE DRIVE / REFLECTION DRIVE AREA
ROAD RECONSTRUCTION - PHASE 1

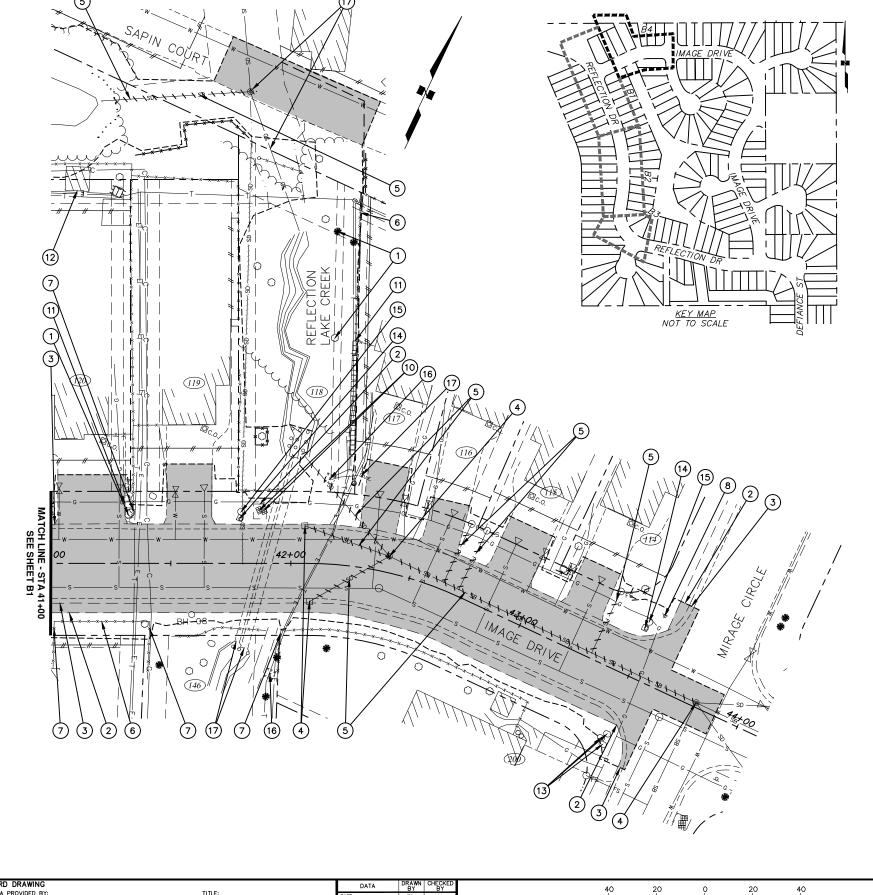
DEMOLITION PLAN

STA 14+00 TO STA 18+00

LE HOR. 1"=20" GRID SW1638, SW1738 B2

VER. N/A DATE JAN 2020 STATUS 95% SHEET B2





LEGEND

- CLEAR AND GRUB WITHIN LIMITS OF DISTURBANCE AFTER CLEARING LIMITS HAVE BEEN APPROVED AND AFTER TEMPORARY TREE PROTECTION FENCES (SECTION 75.12) HAVE BEEN ESTABLISHED AS SHOWN, OR AS DIRECTED BY THE ENGINEER IN THE FIELD (SECTION 20.04). NOT ALL TREES, SHRUBS, AND VEGETATION ARE SPECIFICALLY CALLED OUT OR SHOWN.
- 2 REMOVE SIDEWALK OR CONCRETE APRON (SECTION 20.07).
- (3) REMOVE CURB AND GUTTER (SECTION 20.08).
- (4) REMOVE MANHOLE, CATCH BASIN, OR CLEANOUT (SECTION 55.11).
- (5) REMOVE PIPE (SECTION 70.07).
- REMOVE AND RESET FENCE (SECTION 70.08)
- 7 REMOVE FENCE (SECTION 70.08).
- REMOVE AND SALVAGE SIGN. THIS WORK SHALL BE INCIDENTAL TO THE BID ITEM STANDARD SIGNS (SECTION 70.11).
- RELOCATE MAILBOX OR CLUSTER MAILBOX UNIT (SECTION 70.17).
- REMOVAL/DISPOSAL AND/OR SALVAGE/INSTALLATION OF OBSTRUCTIONS (SECTION 70.22) SEE NOTE 3.
- 12 REMOVE AND RELOCATE SHED (SECTION 70.23).
- 13) SALVAGE AND RELOCATE EXISTING BOULDERS OR DISPOSE OF BOULDERS AS DIRECTED IN THE FIELD BY ENGINEER (SECTION 75.11).
- REMOVE JUNCTION BOX (SECTION 80.08).
- REMOVE LUMINAIRE POLE (SECTION 80.28).
- REMOVE LOAD CENTER (SECTION 80.28).
- (17) PROTECT IN PLACE
- REMOVAL OF PAVEMENT (SECTION 20.09) AND/OR, SIDEWALK, CURB & GUTTER, AND CONCRETE, AS SHOWN & NOTED IN SUMMARY TABLES.
- --- APPROXIMATE LIMITS OF DISTURBANCE
- · \ \ REMOVE PIPE
- ** TEMPORARY TREE PROTECTION FENCE (SECTION 75.12), LOCATIONS TO BE FIELD VERIFIED, SEE DETAIL 1 ON SHEET B3.

- 1. SEE SUMMARY TABLE SHEETS B5 B8 FOR STATION AND OFFSET OF DEMOLITION ITEMS.
- 2. SEE ROADWAY IMPROVEMENTS (R) SHEETS FOR DRIVEWAY RECONSTRUCTION LIMITS.
- 3. EXISTING PRIVATE LANDSCAPING FEATURES SUCH AS RETAINING WALLS, TIMBERS, PLANTERS, LANDSCAPING ROCKS, ETC. ARE LOCATED IN THE ROW AND/OR ON PROPERTY WITHIN THE WORK ZONE. CONTRACTOR SHALL REMOVE ITEMS AS DESCRIBED IN THESE DEMOLITION PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD. NOT ALL OBSTRUCTIONS ARE SPECIFICALLY CALLED OUT OR SHOWN. IN EACH CASE, THE CONTRACTOR AND THE ENGINEER SHALL COORDINATE WITH PROPERTY OWNER. IF PROPERTY OWNER WISHES TO SALVAGE ITEMS THAT ARE CURRENTLY IN ROW AND NOT ALLOWED TO BE REINSTALLED THERE, CONTRACTOR SHALL PLACE ITEMS ON OWNER'S PROPERTY. IF OWNER DOES NOT WANT ITEMS PLACED ON PROPERTY, CONTRACTOR SHALL DISPOSE OF REMOVED ITEMS AT A CONTRACTOR-SUPPLIED LOCATION. MATERIALS TO BE REINSTALLED ON PROPERTY OR ALLOWED TO BE REINSTALLED IN THE ROW SHALL BE CAREFULLY REMOVED, PROTECTED AND STORED BY THE CONTRACTOR UNTIL READY TO BE REINSTALLED. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE ENGINEER OF EXISTING DAMAGE TO ITEMS TO BE SALVAGED PRIOR TO REMOVAL. UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN WRITING PRIOR TO REMOVAL, IF ANY SALVAGED ITEMS ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THOSE ITEMS IN KIND INCLUDING MATCHING TYPE, COLOR, AND MANUFACTURER.

	CORD DRAWING									
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	BY:		TITLE:				DATE:			
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	COMPANY:					DATE: _				TEL
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PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					11
GAS	MV	JK	STAKING								
TELEPHONE	MV	JK									ENG
ELECTRIC	JH	TK									
DESIGN	RB	JK	ASBUILT								39
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						ı
PRELIMINARY/FINAL	RB	JK	INSPECTOR								ı
MUNICIPAL/STATE	RB	JK									<u> </u>
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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

DEMOLITION PLAN

STA 41+00 TO 43+63

GRID SW1638, SW1738 HOR. 1"=20"

REMOVE	SIDEWALK OR CONCR	RETE APRON				2
SHEET	APPX STATION BEGIN	APPX OFFSET (FT)	APPX STATION END	APPX OFFSET (FT)	AREA (SY)	REMARKS
B1	9+82.9	30.7 RT	14+00.0	20.3 RT	188	REFLECTION DR SIDEWALK
B1	12+35.7	16.4 LT	12+55.4	16.4 LT	49	PARCEL 124 DRIVEWAY
B1	40+23.2	20.6 RT	41+00.0	20.6 RT	32	IMAGE DR SIDEWALK
B2	14+00.0	20.3 RT	18+00.0	20.4 RT	176	REFLECTION DR SIDEWALK
B2	14+39.0	20.0 LT	14+39.0	20.0 LT	5	REFLECTION DR MAILBOX PAD
B2	14+70.1	24.1 RT	14+70.1	24.1 RT	6	REFLECTION DR MAILBOX PAD
B2	17+60.8	20.6 RT	17+77.3	20.0 RT	31	PARCEL 19 DRIVEWAY
В3	18+00.0	20.4 RT	19+33.9	33.0 RT	71	REFLECTION DR SIDEWALK
В3	19+65.7	32.1 RT	20+05.0	20.5 RT	23	REFLECTION DR SIDEWALK
B4	41+00.0	20.6 RT	43+54.1	20.5 RT	108	IMAGE DR SIDEWALK
B4	41+84.5	21.7 LT	41+89.8	21.6 RT	4	IMAGE DR MAILBOX PAD
В4	61+62.5	20.6 RT	61+75.8	20.4 RT	4	MIRAGE CIRCLE SIDEWALK

20.0	8
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REMOVE	CURB AND GUTTER	₹				3
SHEET	APPX STATION BEGIN	APPX OFFSET (FT)	APPX STATION END	APPX OFFSET (FT)	LENGTH (FT)	REMARKS
B1	9+90.0	16.4 LT	41+00.0	16.4 LT	191	REFLECTION DR/IMAGE DR
B1	9+90.0	16.5 RT	14+00.0	16.4 RT	399	REFLECTION DR
B1	14+00.0	16.3 LT	41+00.0	16.6 RT	349	REFLECTION DR/IMAGE DR
B2	14+00.0	16.3 LT	18+00.0	16.6 LT	404	REFLECTION DR
B2	14+00.0	16.4 RT	18+00.0	16.3 RT	396	REFLECTION DR
В3	18+00.0	16.6 LT	20+05.0	16.5 LT	183	REFLECTION DR
В3	18+00.0	16.3 RT	19+38.6	45.5 RT	173	REFLECTION DR/LOON COVE CIR
В3	19+61.3	45.6 RT	20+05.0	16.5 RT	68	REFLECTION DR/LOON COVE CIR
B4	41+00.0	16.4 LT	61+62.4	16.7 RT	281	IMAGE DR
B4	41+00.0	16.6 RT	43+62.1	36.1 RT	266	IMAGE DR

REMOVE	REMOVE PAVEMENT									
SHEET	STATION TO STATION	OFFSET	AREA (SY)	REMARKS						
B1	BOP TO STA 14+00, STA 40+00 TO 41+00	LT & RT	2,296	RELFECTION DRIVE, IMAGE DRIVE, DRIVEWAYS						
B2	STA 14+00 TO STA 18+00	LT & RT	2,035	RELFECTION DRIVE, DRIVEWAYS						
В3	STA 18+00 TO STA 20+05	LT & RT	1,166	REFLECTION DRIVE, LOON COVE CIRCLE, DRIVEWAYS						
		·								
B4	STA 41+00 TO EOP	LT & RT	1,374	IMAGE DRIVE, DRIVEWAYS						

- NOTES: 1. SEE ROADWAY IMPROVEMENT SHEETS FOR ROADWAY PAVEMENT REMOVAL LIMITS.
 - 2. SEE DRIVEWAY RECONSTRUCTION TABLE FOR DRIVEWAY PAVEMENT REMOVAL LIMITS.

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REMOVE MAN	NHOLE OR CATCH	BASIN			4
SHEET	APPX STATION	APPX OFFSET (FT)	CATCH BASIN	MANHOLE	REMARKS
B1	10+14.0	12.6 LT		X	
B1	11+48.6	15.6 LT	X		
B1	11+59.3	12.1 RT		Х	
B1	11+62.2	15.7 RT	X		
B2	14+49.5	1.7 LT		X	
В3	18+42.7	15.8 RT	X		
В3	18+51.5	8.5 RT		X	
В3	18+66.3	15.4 LT	X		
В3	19+43.6	7.7 RT		X	
В3	30+33.3	14.3 RT	X		
В3	30+33.2	14.1 LT	X		
B4	42+05.9	15.6 LT	X		
B4	42+08.0	15.8 RT	X		
B4	42+39.9	6.8 LT		Х	
B4	43+80.2	1.8 LT		X	

REMOV	E PIPE						(5)
SHEET	APPX STA BEGIN	APPX OFFSET (FT)	APPX STA END	APPX OFFSET (FT)	SIZE (INCH)	LENGTH (FT)	REMARKS
В1	9+66.3	86.4 LT	10+13.9	12.6 LT	18	93	STORM DRAIN
B1	10+13.9	12.6 LT	11+59.3	12.1 RT	10	147	STORM DRAIN
B1	11+59.3	12.1 RT	11+48.6	15.6 LT	10	30	STORM DRAIN
B1	11+59.3	12.1 RT	11+62.2	15.6 RT	10	5	STORM DRAIN
B1	11+59.3	12.1 RT	14+49.5	1.7 LT	18	290	STORM DRAIN
B1	11+66.4	12.1 RT	11+66.4	30.0 LT	6	42	FOOTING DRAIN
B1	12+00.4	12.0 RT	12+00.4	30.0 LT	6	42	FOOTING DRAIN
B1	12+42.4	12.0 RT	12+42.4	30.0 LT	6	42	FOOTING DRAIN
B1	12+78.4	12.0 RT	12+78.4	30.0 LT	6	42	FOOTING DRAIN
B1	13+22.7	11.9 RT	13+21.8	30.2 LT	6	42	FOOTING DRAIN
B1	13+57.2	10.3 RT	13+54.5	30.0 LT	6	40	FOOTING DRAIN
B2	14+00.6	6.1 RT	13+96.2	30.0 LT	6	36	FOOTING DRAIN
B2	14+34.0	1.2 RT	14+28.9	30.0 LT	6	32	FOOTING DRAIN
B2	14+49.5	1.7 LT	18+51.5	8.5 RT	10	402	STORM DRAIN
B2	14+51.7	1.2 LT	14+57.5	30.0 LT	6	29	FOOTING DRAIN
B2	14+91.1	5.9 RT	14+96.4	30.0 LT	6	36	FOOTING DRAIN
B2	15+11.9	8.9 RT	15+16.6	30.0 LT	6	39	FOOTING DRAIN
B2	15+65.0	13.6 RT	15+67.4	30.0 LT	6	44	FOOTING DRAIN
B2	15+99.4	14.5 RT	15+99.8	30.0 LT	6	45	FOOTING DRAIN
B2	16+31.6	14.3 RT	16+30.1	30.0 LT	6	44	FOOTING DRAIN
B2	16+68.1	12.3 RT	16+64.8	30.0 LT	6	42	FOOTING DRAIN
B2	17+11.4	7.5 RT	17+06.3	30.0 LT	6	38	FOOTING DRAIN
B2	17+44.7	2.1 RT	17+38.9	30.0 LT	6	33	FOOTING DRAIN
	1		1	l			

NOTE: EXISTING HEAT TRACE AND/OR HEAT TRACE CONDUIT IS LOCATED WITHIN EXISTING STORM DRAIN & CULVERT PIPES. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING HEAT TRACE AND/OR HEAT TRACE CONDUIT. THIS WORK SHALL BE INCIDENTAL TO SECTION 70.07 PAY ITEM AND NO SEPARATE PAYMENT SHALL BE MADE.

17+83.8

	ECORD DRAWING		
1.	DATA PROVIDED BY:		BASE
	THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A	TRUE AND ACCURATE REPRESENTATION	TOPO
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BASE	TS	MJ									1
TOPOGRAPHY	TS	MJ									
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	н
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					11
GAS	MV	JK	STAKING								
TELEPHONE	MV	JK									EN
ELECTRIC	JH	TK									1
DESIGN	RB	JK	ASBUILT								1
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						1
PRELIMINARY/FINAL	RB	JK	INSPECTOR								1
MUNICIPAL/STATE	RB	JK									1
PLAN CHECK CONSTRUCTION RECORD			CONSTRUCTION RECORD		VERTICAL DATUM			REVISIONS			



3.9 LT





30.0 LT

PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

DEMOLITION SUMMARY

FOOTING DRAIN

_	HOR.	N/A	GRID SW1638, SW1738			Е
	VER.	N/A	DATE JAN 2020	STATUS 95%	SHEET	

REMOV	EMOVE PIPE S								
SHEET	APPX STA BEGIN	APPX OFFSET (FT)	APPX STA END	APPX OFFSET (FT)	SIZE (INCH)	LENGTH (FT)	REMARKS		
В3	18+51.5	8.5 RT	18+42.7	15.8 RT	10	12	STORM DRAIN		
В3	18+51.5	8.5 RT	18+66.3	15.4 LT	10	28	STORM DRAIN		
В3	18+51.5	8.5 RT	19+43.6	7.7 RT	12	96	STORM DRAIN		
В3	19+37.8	33.9 RT	19+48.6	32.0 RT	10	13	STORM DRAIN		
В3	19+43.6	7.7 RT	19+48.6	32.0 RT	18	25	STORM DRAIN		
В3	19+43.6	7.7 RT	19+62.2	1.7 RT	12	20	STORM DRAIN		
В3	19+48.6	32.0 RT	19+62.0	33.7 RT	10	16	STORM DRAIN		
В3	19+52.1	30.0 LT	19+62.2	1.7 RT	6	33	FOOTING DRAIN		
В3	19+62.2	1.7 RT	20+07.9	2.9 LT	12	46	STORM DRAIN		
B4	41+21.2	192.7 LT	41+83.2	196.6 LT	24	62	STORM DRAIN		
B4	42+05.7	44.9 LT	42+39.9	6.8 LT	18	55	STORM DRAIN		
В4	42+05.9	15.6 LT	42+39.9	6.8 LT	12	37	STORM DRAIN		
B4	42+08.0	15.8 RT	42+39.9	6.8 LT	12	38	STORM DRAIN		
B4	42+39.9	6.8 LT	43+80.2	1.8 LT	18	142	STORM DRAIN		
B4	42+63.9	3.1 LT	42+65.4	30.0 LT	6	27	FOOTING DRAIN		
B4	42+70.8	2.8 LT	42+71.2	30.0 LT	6	27	FOOTING DRAIN		
B4	43+32.0	2.3 LT	43+32.3	30.6 LT	6	28	FOOTING DRAIN		

NOTE: EXISTING HEAT TRACE AND/OR HEAT TRACE CONDUIT IS LOCATED WITHIN EXISTING STORM DRAIN & CULVERT PIPES. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING HEAT TRACE AND/OR HEAT TRACE CONDUIT. THIS WORK SHALL BE INCIDENTAL TO SECTION 70.07 PAY ITEM AND NO SEPARATE PAYMENT SHALL BE MADE.

70.08										
REMOVE	E AND RES	ET FENCE								6
		EXISTING L	OCATION		PROPOSED LOCATION					
SHEET	APPX BEGIN STATION	APPX BEGIN OFFSET (FT)	APPX END STATION	APPX END OFFSET (FT)	APPX BEGIN STATION	APPX BEGIN OFFSET (FT)	APPX END STATION	APPX END OFFSET (FT)	LENGTH (FT)	REMARKS
B1	9+99.2	126.6 LT	10+11.1	168.2 LT	10+02.9	124.2 LT	10+14.6	165.5 LT	45.3	WOOD
B1	9+77.8	24.4 LT	10+21.9	25.7 LT	9+77.8	24.4 LT	10+21.9	25.7 LT	48.5	WOOD
B1	9+67.6	34.5 RT	10+03.4	28.4 RT	9+67.6	34.5 RT	10+03.1	27.3 RT	31.9	WOOD
B1	40+76.5	16.7 LT	40+88.5	16.6 LT	40+74.5	30.0 LT	40+88.2	30.0 LT	12.0	WOOD
B1	40+88.6	20.6 LT	41+01.8	20.6 LT	40+88.2	30.0 LT	41+02.9	30.0 LT	13.0	WOOD
B4	41+01.4	24.1 RT	41+41.3	24.3 RT	41+01.3	30.0 RT	41+41.0	30.0 RT	39.8	WOOD
B4	41+95.9	27.9 RT	43+16.5	27.4 RT	41+95.7	30.0 RT	43+16.5	30.0 RT	107.8	WOOD
B4	42+17.7	155.6 LT	42+19.2	93.6 LT	42+17.9	155.5 LT	42+19.9	93.4 LT	62.2	WOOD

NOTES:

- 1. PROVIDE TEMPORARY FENCING PER SECTION 70.22 FOR ALL FENCES REMOVED OR AS DIRECTED BY THE ENGINEER.
 2. STAKE RESET FENCE LAYOUT IN THE FIELD FOR ENGINEER TO REVIEW AND APPROVE PRIOR TO INSTALLATION. THIS WORK SHALL BE INCIDENTAL TO SECTION 70.08 PAY ITEM.

70.08

REMOVE	REMOVE FENCE ①								
SHEET	APPX BEGIN STATION	APPX BEGIN OFFSET (FT)	APPX END STATION	APPX END OFFSET (FT)	LENGTH (FT)	REMARKS			
B1	9+99.2	126.6 LT	10+02.9	124.2 LT	6.2	WOOD			
B1	10+11.1	168.2 LT	10+14.6	165.5 LT	6.5	WOOD			
B1	40+88.6	20.6 LT	40+88.2	30.0 LT	9.4	WOOD			
B4	41+01.4	24.1 RT	41+01.3	30.0 RT	5.9	WOOD			
B4	41+41.3	24.3 RT	41+41.0	30.0 RT	5.8	WOOD			

70.11										
REMOVE AND SALVAGE EXISTING SIGNS										
SHEET	APPX STATION	APPX OFFSET (FT)	SIGN TYPE	LEGEND	SIGN POST	REMARKS				
			D3-1D	IMAGE DR	PERFORATED STEEL TUBE					
B1	40+24	25.8 LT	D3-1D	REFLECTION DR						
			R1-1	STOP						
B1	12+21	20.4 RT	W17-1	SPEED HUMP	PERFORATED STEEL TUBE					
B1	12+31	17.8 LT	W17-1	SPEED HUMP	PERFORATED STEEL TUBE					
			D3-1D	LOON COVE CIR						
В3	19+68	30.9 RT	D3-1D	REFLECTION DR	PERFORATED STEEL TUBE					
			R1-1	STOP						
B4	43+53	29.0 LT	R1-1	STOP	PERFORATED STEEL TUBE					

NOTE: WORK TO REMOVE AND SALVAGE EXISTING SIGNS & POSTS SHALL BE INCIDENTAL TO 70.11 STANDARD SIGN PAY ITEM.

70.11										
REMOVE	AND RELOCATE SIGNS									
	FR	ОМ	ТО							
SHEET	APPX STATION	APPX OFFSET (FT)	APPX STATION	APPX OFFSET (FT)	SIGN TYPE	LEGEND	REMARKS			
B1, S1	11+89	21.0 RT	11+89	25.0 RT	SPECIAL	CRIME WATCH NEIGHBORHOOD				
B2, S1	17+78	18.4 LT	17+78	20.0 LT	SPECIAL	CRIME WATCH NEIGHBORHOOD				

70.17										
RELOCA	RELOCATE CLUSTER MAILBOX UNIT									
	EXISTING LOCA	ATION		NEW LC						
	APPX	APPX	APPX	APPX	PROPOSED	PROPOSED				
SHEET	STATION	OFFSET (FT)	STATION	OFFSET (FT)	WIDTH (FT)	LENGTH (FT)	REMARKS			
B2, R2	14+39.1	20.0 LT	14+47.8	19.4 LT	6	9	SOUTH OF PARCEL 129			
B2, R2	14+68.8	23.5 RT	14+70.0	24.1 RT	4	13.5	EAST OF PARCEL 11/12			
B4, R4	41+87.1	21.7 LT	41+87.1	23.5 LT	4	7	EAST OF PARCEL 119			

NOTE: SEE SHEET D4 FOR MAILBOX INSTALLATION DETAILS.

RECORD DRAWING	
1. DATA PROVIDED BY: TITLE: TITLE:	BASE
THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTA OF THE PROJECT AS CONSTRUCTED.	101 00104
	PROFILE
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DATA	DRAWN BY	CHECKED									
ASE	TS	MJ									1
OPOGRAPHY	TS	MJ									
ROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	
TORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					7
VATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					ı A
GAS	MV	JK	STAKING								
ELEPHONE	MV	JK									ENG
LECTRIC	JH	TK									
DESIGN	RB	JK	ASBUILT								31
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						ı
RELIMINARY/FINAL	RB	JK	INSPECTOR						1		
MUNICIPAL/STATE	RB	JK									<u> </u>
PLAN (CHECK		CONSTRUCTION RECORD		VERTICAL DATUM		REVISIONS				
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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

DEMOLITION SUMMARY

GRID SW1638, SW1738 B6_{of}B8 SCALE HOR. N/A DATE JAN 2020 STATUS 95%

EMOVAL/DIS	POSAL AND/OR S	ALVAGE/INSTALLAT	TION OF OBSTRUCTIONS		(1)
SHEET	APPX STATION	APPX OFFSET (FT)	OBSTRUCTION ITEM	QUANTITY	REMARKS
B1	9+68	113.9 LT	TRASH	10 CY	
B1	10+69	23.3 RT	LANDSCAPING ROCKS	65 SF	
B1	10+79	24.4 RT	PLANTER	3 SF	
B1	11+11	24.7 RT	PLANTER	3 SF	
B1	11+39	28.0 LT	LANDSCAPING ROCKS	298 SF	
B1	11+78	18.9 LT	LANDSCAPING ROCKS	53 SF	
B1	12+30	18.3 LT	LANDSCAPING ROCKS	107 SF	
B1	12+42	28.4 RT	LANDSCAPING ROCKS	34 SF	
B1	12+57	18.8 LT	LANDSCAPING ROCKS	41 SF	
B1	12+61	25.0 RT	LANDSCAPING ROCKS	26 SF	
B1	13+52	21.5 RT	PLANTERS	45 SF	
B1	13+93	21.5 RT	PLANTERS	27 SF	
B1	40+92	19.7 LT	PLANTERS	7 SF	
B1	40+98	19.7 LT	PLANTERS	7 SF	
B2	14+13	21.1 RT	PLANTERS	52 SF	
B2	14+38	26.2 LT	MODULAR CONCRETE WALL	10 LF	
B2	14+57	21.3 RT	PLANTERS	32 SF	
B2	14+91	26.0 LT	LANDSCAPING ROCKS	44 SF	
B2	15+09	26.5 LT	LANDSCAPING ROCKS	33 SF	
B2	15+22	23.6 RT	LANDSCAPING ROCKS	10 SF	
B2	15+22	27.0 LT	LANDSCAPING ROCKS	34 SF	
B2	15+44	23.7 RT	LANDSCAPING ROCKS	10 SF	
B2	15+45	24.7 LT	LANDSCAPING ROCKS	36 SF	
B2	15+56	23.8 LT	LANDSCAPING EDGING	23 SF	
B2	15+75	22.8 LT	LANDSCAPING EDGING	32 SF	
B2	15+90	22.3 LT	LANDSCAPING EDGING	50 SF	
B2	16+18	21.7 LT	LANDSCAPING BED	22 SF	
B2	16+68	28.0 RT	LANDSCAPING ROCKS	75 SF	
B2	16+81	20.5 LT	LANDSCAPING ROCKS	127 SF	
B2	17+22	20.5 LT	TIMBER EDGING	5 LF	
B2	17+61	20.7 LT	TIMBER EDGING	5 LF	
B2	17+95	50.0 RT	STAIRS	18 SF	
В3	18+03	25.0 LT	PAVERS	24 SF	
В3	18+24	47.6 RT	STAIRS	24 SF	
В3	18+27	32.5 RT	LANDSCAPING EDGING	54 SF	
В3	18+29	25.0 LT	PAVERS	30 SF	
В3	18+48	40.8 RT	RETAINING WALL (TIMBER)	42 LF	
В3	18+77	23.2 LT	LANDSCAPING ROCKS	23 SF	
В3	19+12	24.4 LT	LANDSCAPING ROCKS	12 SF	
B4	41+33	21.5 LT	LANDSCAPING ROCKS	46 SF	
B4	42+20	69.6 LT	RETAINING WALL (TIMBER)	47 LF	

70.23

REMOVE	AND RELOCATE	SHED (PARCEL 12	20)				12
SHEET	STATION	OFFSET	LENGTH (FT)	WIDTH (FT)	AREA (SQ FT)	REMARKS	
B4	40+24	145.2 LT	10.0	10.0	100.0		

75.11]		
SALVAGE ANI	D RELOCATE OR DISP	OSE EXISTING BOULDER	(3)
SHEET	APPX STATION	APPX OFFSET (FT)	REMARKS
B1	12+29	26.0 RT	
B2	16+29	24.8 RT	
B2	16+78	26.4 RT	
B2	17+05	23.8 RT	
B2	17+17	23.8 RT	
B2	17+44	23.8 RT	
B4	43+51	28.2 RT	
B4	43+52	25.6 RT	
B4	43+52	30.3 RT	

ECORD DRAWING		Г
DATA PROVIDED BY:		ВА
	TRUE AND ACCURATE REPRESENTATION	TOI PR
		PR
CONTRACTOR:		ST
BY: TITLE:		W
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COMPANY:	DATE:	TE
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	DATA PROVIDED BY: THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: BY: TITLE: DATA TRANSFERDED BY:	DATA PROVIDED BY: TITLE: THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: DATE: DATE: DATA TRANSFERRED BY: TITLE: DATE: COMPANY: DATE: BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION). THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: TITLE: TITLE: TITLE: TITL

DATA	DRAWN BY	CHECKED BY									Г
BASE	TS	MJ									ı
TOPOGRAPHY	TS	ΜJ									J.
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	Н
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					и
GAS	MV	JK	STAKING								Н
TELEPHONE	MV	JK									ΙĒ
ELECTRIC	JH	TK									1~
DESIGN	RB	JK	ASBUILT								1
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						1
PRELIMINARY/FINAL	RB	JK	INSPECTOR								1
MUNICIPAL/STATE	RB	JK									L
PLAN (HECK		CONSTRUCTION RECORD		VERTICAL DATUM	·			REVISIONS		







PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

DEMOLITION SUMMARY

SCALE HOR. N/A VER. N/A

GRID SW1638, SW1738 B7 of B8

TEMPOR	ARY TREE PRO	DTECTION FENC	E			
		PROPOSED	LOCATION			
	APPROX BEGIN	APPROX BEGIN	APPROX END	APPROX END	LENGTH	REMARKS
SHEET	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(FT)	
B1	9+24.8	129.2 LT	9+32.8	117.8 LT	16.6	
B1	9+32.8	117.8 LT	9+26.7	99.0 LT	20.8	
B1	9+26.7	99.0 LT	9+28.8	79.1 LT	20.1	
B1	9+28.8	79.1 LT	9+38.4	57.3 LT	25.0	
B1	9+38.4	57.3 LT	9+48.1	47.9 LT	15.0	
B1	9+48.1	47.9 LT	9+65.1	47.9 LT	20.2	
B1	9+65.1	47.9 LT	9+76.6	24.9 LT	26.4	
B1	9+84.3	73.9 LT	10+22.5	26.0 LT	66.2	
B1	13+51.8	31.2 RT	13+56.6	31.2 RT	4.6	
B1	13+56.6	31.2 RT	13+56.7	35.0 RT	3.8	
B1	40+37.8	27.6 LT	40+45.2	27.7 LT	7.4	
B1	40+45.2	27.7 LT	40+49.3	34.9 LT	8.3	
B2	15+10.5	36.3 RT	15+11.4	31.7 RT	4.7	
B2	15+54.3	29.0 RT	15+59.5	29.0 RT	5.0	
B2	15+59.5	29.0 RT	15+59.2	34.0 RT	5.0	
B2	16+16.7	24.1 LT	16+16.8	21.1 LT	3.0	
B2	16+16.8	21.1 LT	16+19.7	21.0 LT	3.1	
B2	16+19.7	21.0 LT	16+19.9	24.3 LT	3.3	
B2	16+77.1	28.3 RT	16+80.1	28.1 RT	2.8	
B2	16+80.1	28.1 RT	16+80.5	32.3 RT	4.3	
B2	17+06.0	27.5 RT	17+12.5	27.4 RT	6.2	
B2	17+44.4	26.3 RT	17+50.9	26.4 RT	6.4	
В3	19+77.0	30.4 RT	19+84.3	26.3 RT	9.6	
В3	19+84.3	26.3 RT	19+96.9	26.0 RT	14.8	
B4	41+35.2	170.0 LT	41+56.8	173.7 LT	21.9	
B4	41+56.8	173.7 LT	41+55.4	182.7 LT	9.1	
B4	41+55.4	182.7 LT	41+75.0	184.4 LT	19.8	
B4	41+75.0	184.4 LT	41+82.6	177.3 LT	10.4	
B4	41+85.2	49.3 LT	41+85.2	56.3 LT	7.0	
B4	41+85.2	56.3 LT	41+90.2	56.3 LT	5.0	
B4	41+90.2	56.3 LT	41+90.2	49.3 LT	7.0	
В4	41+90.2	49.3 LT	41+85.2	49.3 LT	5.0	
В4	42+18.2	171.8 LT	42+18.7	155.4 LT	16.4	

REMOVE JUNCTION BOX									
SHEET	APPX STATION	APPX OFFSET (FT)	REMARKS						
B1	9+97.4	18.2 LT							
B1	11+38.8	22.1 LT							
B2	14+46.2	20.5 LT							
B2	15+80.0	19.5 LT							
В3	19+74.5	19.0 LT							
B4	41+78.9	18.8 LT							
B4	43+47.8	21.1 LT							

80.28

REMOVE LUI	MINAIRE POLE		(15)
SHEET	APPX STATION	APPX OFFSET (FT)	REMARKS
B1	9+96.8	21.9 LT	
B1	11+39.1	24.3 LT	
B1	12+99.9	23.6 LT	
B2	14+45.8	22.5 LT	
B2	15+80.5	21.6 LT	
B2	17+46.6	21.3 LT	FOUNDATION ONLY, SEE NOTE BELOW
B3	19+75.2	21.9 LT	
B4	41+79.3	21.6 LT	
B4	43+48.3	24.2 LT	

NOTE: CONTRACTOR SHALL REMOVE EXISTING ABANDONED LIGHT POLE FOUNDATION WITHIN PARCEL 138 DRIVEWAY. THE LOCATION OF THE ABANDONED LIGHT POLE SHOWN ON THE DRAWINGS IS APPROXIMATE. CONTRACTOR SHALL EXCAVATE DRIVEWAY AS REQUIRED TO LOCATE AND COMPLETELY REMOVE LIGHT POLE FOUNDATION. ALL WORK ASSOCIATED WITH LOCATING AND REMOVING EXISTING ABANDONED LIGHT POLE FOUNDATION SHALL BE INCLUDED IN THE 1 EACH 80.28 REMOVE LUMINAIRE POLE BID ITEM AND NO SEPARATE PAYMENT SHALL BE MADE.

80.28

REMOVE LOAD CENTER									
SHEET	APPX STATION	APPX OFFSET (FT)	REMARKS						
B1	40+36.7	165.7 LT	HEAT TRACE						
B4	41+91.3	46.1 RT	ILLUMINATION						
B4	42+14.5	35.5 LT	HEAT TRACE						

श	ECORD DRAWING			
ı.	DATA PROVIDED BY:		TITLE:	
	THIS WILL SERVE TO CERTIFY THAT THESE	RECORD DRAWINGS ARE A	TRUE AND ACCURATE REPRESENTAT	
	OF THE PROJECT AS CONSTRUCTED.			PRO
	CONTRACTOR:			
	BY:	_ TITLE:	DATE:	
2.	DATA TRANSFERRED BY:		TITLE:	GAS
	COMPANY:		DATE:	TELE
	BASED ON PERIODIC FIELD OBSERVATIONS			ELEC
	SUPERVISION). THE CONTRACTOR-PROVIDE			
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DATA	DRAWN BY	CHECKED									
BASE	TS	MJ									1
TOPOGRAPHY	TS	MJ									
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	H.
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	ΜV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					м
GAS	ΜV	JK	STAKING								
TELEPHONE	ΜV	JK									EN
ELECTRIC	JH	TK									l
DESIGN	RB	JK	ASBUILT								1
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						
PRELIMINARY/FINAL	RB	JK	INSPECTOR								
MUNICIPAL/STATE	RB	JK									
PLAN (CHECK		CONSTRUCTION RECORD		VERTICAL DATUM			,	REVISIONS		



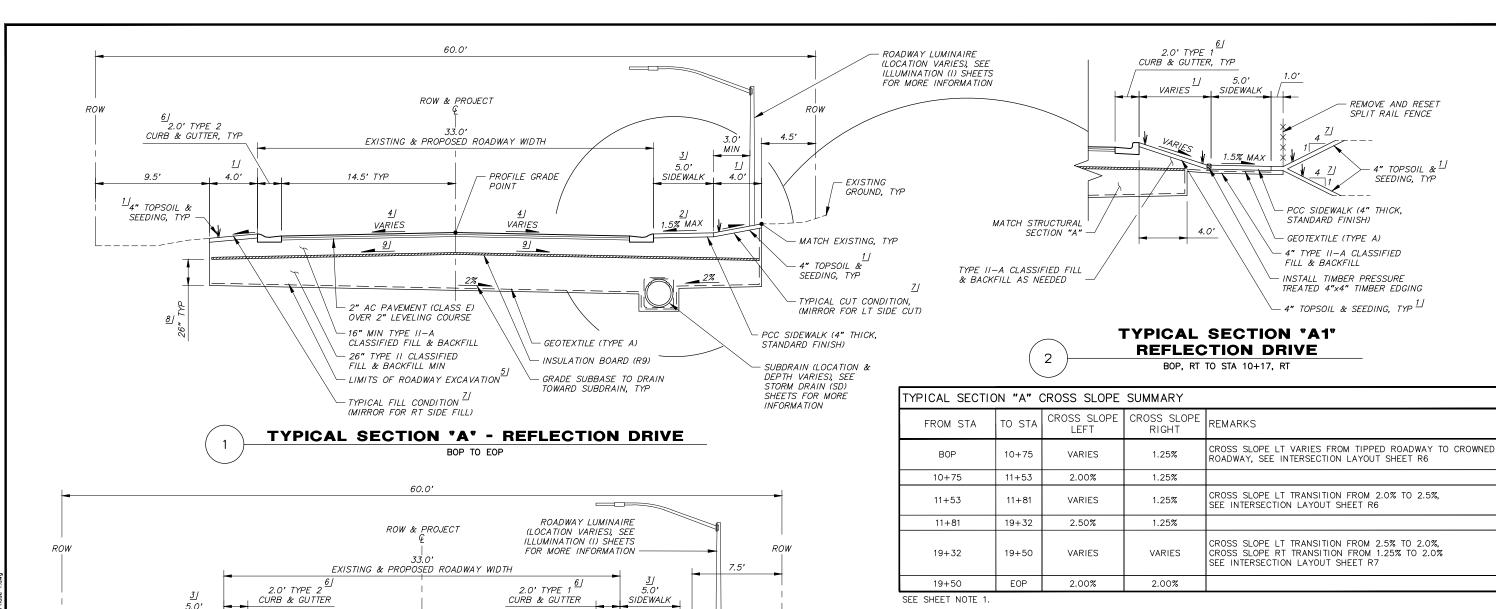




DEMOLITION SUMMARY

SCALE HOR. N/A GRID SWI638, SWI738

SCALE VER. N/A DATE JAN 2020 STATUS 95% SHEET Of B8



MIN

1.5% MAX

SUBDRAIN (LOCATION &

DEPTH VARIES), SEE

STORM DRAIN (SD)

SHEETS FOR MORE

SIDEWALK

5% 1.5% MAX

1.0'

[Z] 4

4" TOPSOIL &

SEEDING, TYP

14.5' TYP

1<u>0</u>]

<u>9</u>]

2" AC PAVEMENT (CLASS E) OVER 2" LEVELING COURSE

CLASSIFIED FILL & BACKFILL

26" TYPE II CLASSIFIED 8

16" MIN TYPF II-A

FILL & BACKFILL MIN

PROFILE GRADE

2%

<u>9</u>]

1<u>0</u>]

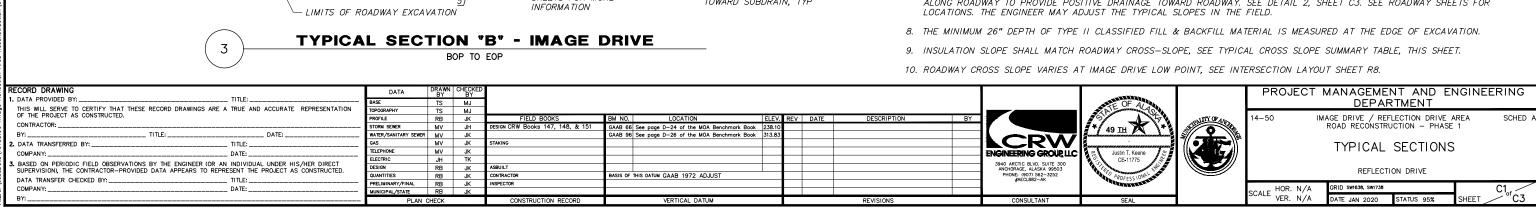
POINT

SHEET NOTES:

1. THE STATION RANGES ARE APPROXIMATE AND MAY BE MODIFIED IN THE FIELD BY THE ENGINEER.

FOOT NOTES:

- 1. PLACE 4" OF TOPSOIL AND SEEDING (SCHEDULE A) ON ALL DISTURBED AREAS.
- 2. THE MAXIMUM SIDEWALK CROSS SLOPE GRADE IS 2% AT DRIVEWAYS.
- 3. INCREASE SIDEWALK THICKNESS TO 6" ACROSS ALL DRIVEWAYS & ADD WELDED STEEL WIRE REINFORCEMENT PER THE
- 4. FOR PROPOSED CROSS SLOPES, SEE TYPICAL CROSS SLOPE SUMMARY TABLE, THIS SHEET.
- 5. PRIOR TO PLACEMENT OF FILL, NATIVE MATERIAL SHALL BE SCARIFIED, PROOF—ROLLED AND COMPACTED AS DIRECTED BY ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
- 6. TOP AC PAVEMENT SHALL BE 1/8" 1/4" ABOVE LIP OF CURB, UNLESS OTHERWISE NOTED. SEE DETAIL 5, SHEET C3.
- 7. THE TYPICAL CUT/FILL SLOPES ARE 4 (HORIZONTAL): 1 (VERTICAL). MODIFY TYPICAL CUT/FILL SLOPES TO A MAXIMUM (STEEPEST) CUT/FILL SLOPE OF 2 (HORIZONTAL): 1 (VERTICAL) AS REQUIRED TO MATCH EXISTING GROUND WITHIN ROW. FILL SLOPES MAY VARY ALÓNG ROADWAY TO PROVIDE POSITIVE DRAINAGE TOWARD ROADWAY. SEE DETAIL 2, SHEET C3. SEE ROADWAY SHEETS FOR LOCATIONS. THE ENGINEER MAY ADJUST THE TYPICAL SLOPES IN THE FIELD.



EXISTING

GROUND,

TYP

- PCC SIDEWALK (4" THICK, STANDARD FINISH)

GEOTEXTILE (TYPE A)

INSULATION BOARD (R9)

TOWARD SUBDRAIN, TYP

GRADE SUBBASE TO DRAIN

1.0'

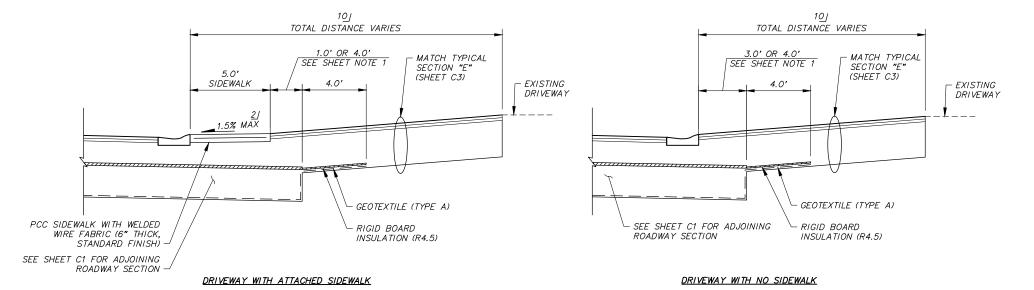
TYPICAL SECTION "C" - LOON COVE CIRCLE (BEYOND CURB RETURN)

SHEET NOTES:

1. SEE SHEET C1 FOR ADJOINING ROADWAY SECTION.

#/FOOT NOTES:

- 1. PLACE 4" OF TOPSOIL AND SEEDING (SCHEDULE A) ON ALL DISTURBED AREAS.
- 2. THE MAXIMUM SIDEWALK CROSS SLOPE GRADE IS 2% AT DRIVEWAYS.
- 3. INCREASE SIDEWALK THICKNESS TO 6" ACROSS ALL DRIVEWAYS & ADD WELDED STEEL WIRE REINFORCEMENT PER THE SPECIFICATIONS.
- 4. ROADWAY CROSS SLOPE VARIES AT SOME LOCATIONS ALONG SIDE STREETS. SEE INTERSECTION LAYOUT SHEETS FOR LOCATIONS. MODIFY ROADWAY CROSS SLOPE AS REQUIRED TO MATCH INTO EXISTING ROADWAY OR AS DIRECTED IN THE FIELD BY THE ENGINEER. PROVIDE SMOOTH TRANSITION TO MATCH EXISTING AND TO PROVIDE POSITIVE DRAINAGE TOWARD DRAINAGE STRUCTURES.
- 5. PRIOR TO PLACEMENT OF FILL, NATIVE MATERIAL SHALL BE SCARIFIED, PROOF—ROLLED AND COMPACTED AS DIRECTED BY ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
- 6. TOP AC PAVEMENT SHALL BE 1/8" 1/4" ABOVE LIP OF CURB, UNLESS OTHERWISE NOTED. SEE DETAIL 5, SHEET C3.
- 7. THE TYPICAL CUT/FILL SLOPES ARE 4 (HORIZONTAL): 1 (VERTICAL). MODIFY TYPICAL CUT/FILL SLOPES TO A MAXIMUM (STEEPEST) CUT/FILL SLOPE OF 2 (HORIZONTAL): 1 (VERTICAL) AS REQUIRED TO MATCH EXISTING GROUND WITHIN ROW. FILL SLOPES
 MAY VARY ALONG ROADWAY TO PROVIDE POSITIVE DRAINAGE TOWARD ROADWAY. SEE DETAIL 2, SHEET C3. SEE ROADWAY SHEETS FOR LOCATIONS. THE ENGINEER MAY ADJUST THE TYPICAL SLOPES IN THE FIELD.
- 8. THE MINIMUM 26" DEPTH OF TYPE II CLASSIFIED FILL & BACKFILL MATERIAL IS MEASURED AT THE EDGE OF EXCAVATION.
- 9. SEE ROADWAY PLAN & PROFILE SHEETS FOR SIDE STREET WIDTHS.
- 10. SEE RECONSTRUCT DRIVEWAY SUMMARY TABLE & RECONSTRUCTION OF DRIVEWAY DETAILS FOR DRIVEWAY RECONSTRUCTION INFORMATION.



TYPCIAL DRIVEWAY CONNECTION SECTION

RECORD DRAWING . DATA PROVIDED BY:_ THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: ____ TITLE: __ ____ DATE: _ . DATA TRANSFERRED BY: __ TITLE:_ COMPANY: _ DATE: _ . BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: __ DATE:

DATA	DRAWN BY	CHECKED							
	TS	MJ							
RAPHY	TS	MJ							
LE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION
A SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10			
R/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83			ĺ
	MV	JK	STAKING						ĺ
HONE	MV	JK							
RIC	JH	TK							ĺ
N	RB	JK	ASBUILT						ĺ
TITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST				
MINARY/FINAL	RB	JK	INSPECTOR		·				
CIPAL/STATE	RB	JK							ĺ
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2

CRW ENGINEERING GROUP LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK





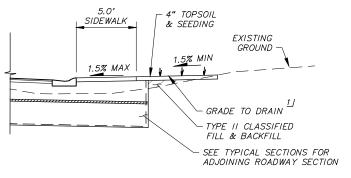
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT 4-50 SCHED

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

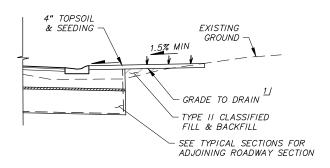
TYPICAL SECTIONS

C2_{of}C3 RID SW1638, SW1738 HOR. N/A DATE JAN 2020

TYPICAL SECTION "E" DRIVEWAY PAVED, CONCRETE, OR INTERLOCKING CONCRETE PAVER



WITH ATTACHED SIDEWALK



2

RECORD DRAWING

CONTRACTOR:

COMPANY:

. DATA PROVIDED BY: _

. DATA TRANSFERRED BY: __

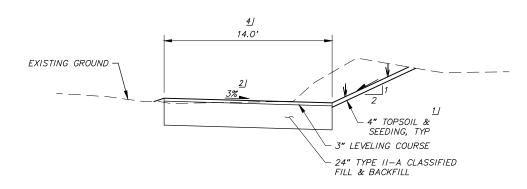
DATA TRANSFER CHECKED BY: __

NO SIDEWALK

SPECIAL FILL GRADING DETAILS

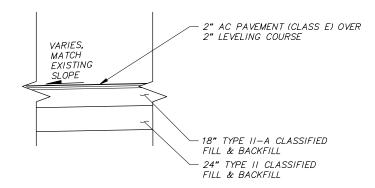
| FOOT NOTES:

- 1. PLACE 4" OF TOPSOIL AND SEEDING (SCHEDULE A) ON ALL DISTURBED AREAS.
- 2. SEE RECONSTRUCT DRIVEWAY SUMMARY TABLE & RECONSTRUCT DRIVEWAY DETAILS FOR DRIVEWAY RECONSTRUCTION INFORMATION.
- 3. INSTALL INSULATION ADJACENT TO DRIVEWAY AND TRANSITION TO DRIVEWAY SECTION PER DETAIL 2, SHEET C2
- 4. WIDTH AND SLOPE VARIES AT SOME LOCATIONS, SEE SHEET SD11.



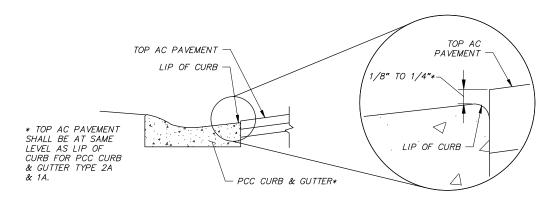
TYPICAL SECTION "F" **SETTLING BASIN DRIVEWAY**

SCALE: NTS



TYPICAL SECTION "G' SAPIN COURT RECONSTRUCTION

SCALE: NTS



CURB AND GUTTER & AC PAVEMENT EDGE DETAIL

MJ THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. AB 96 See page D-26 of the MOA Benchmark Book TITLE:_ _ DATE: _

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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

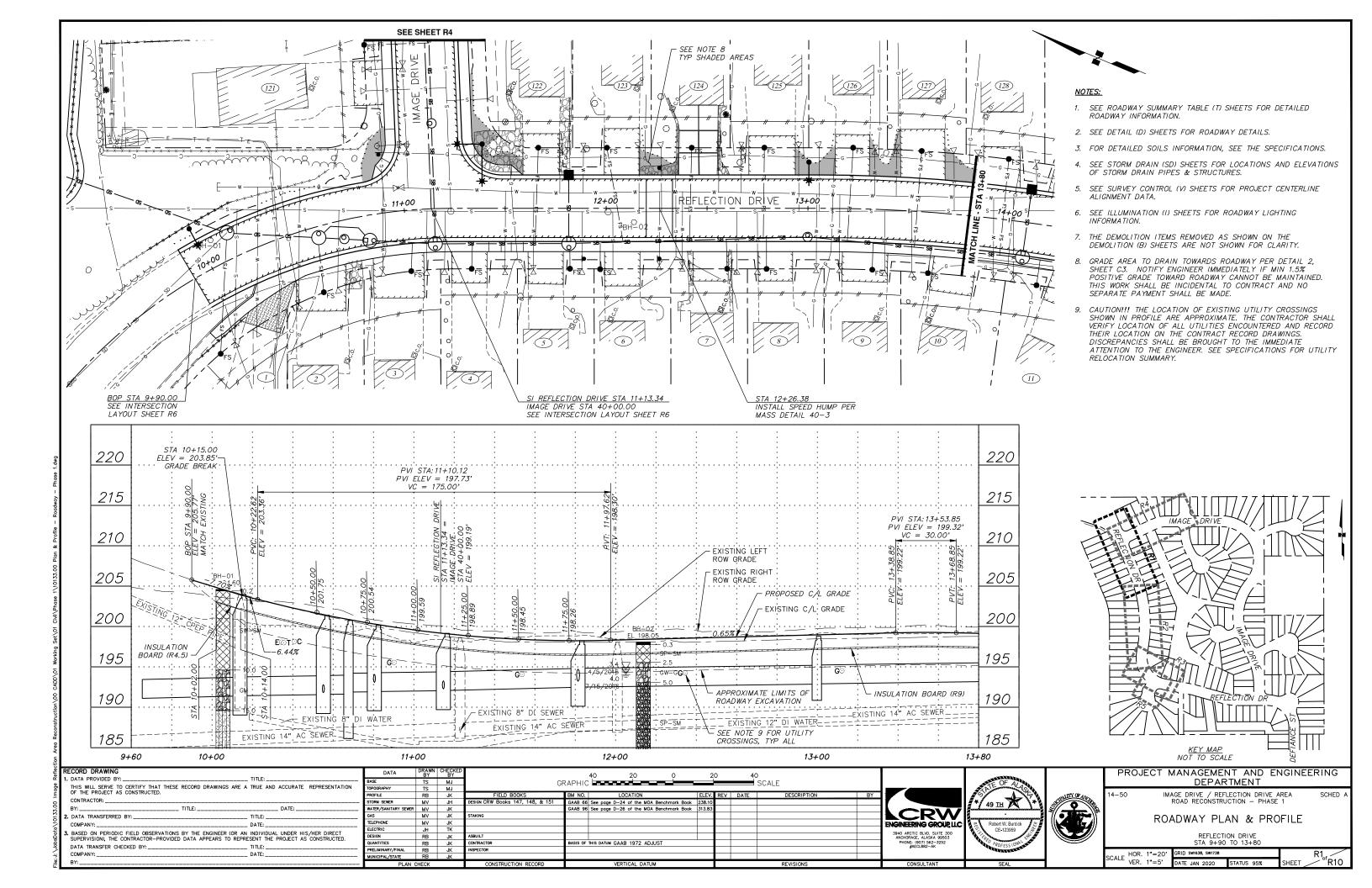
IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

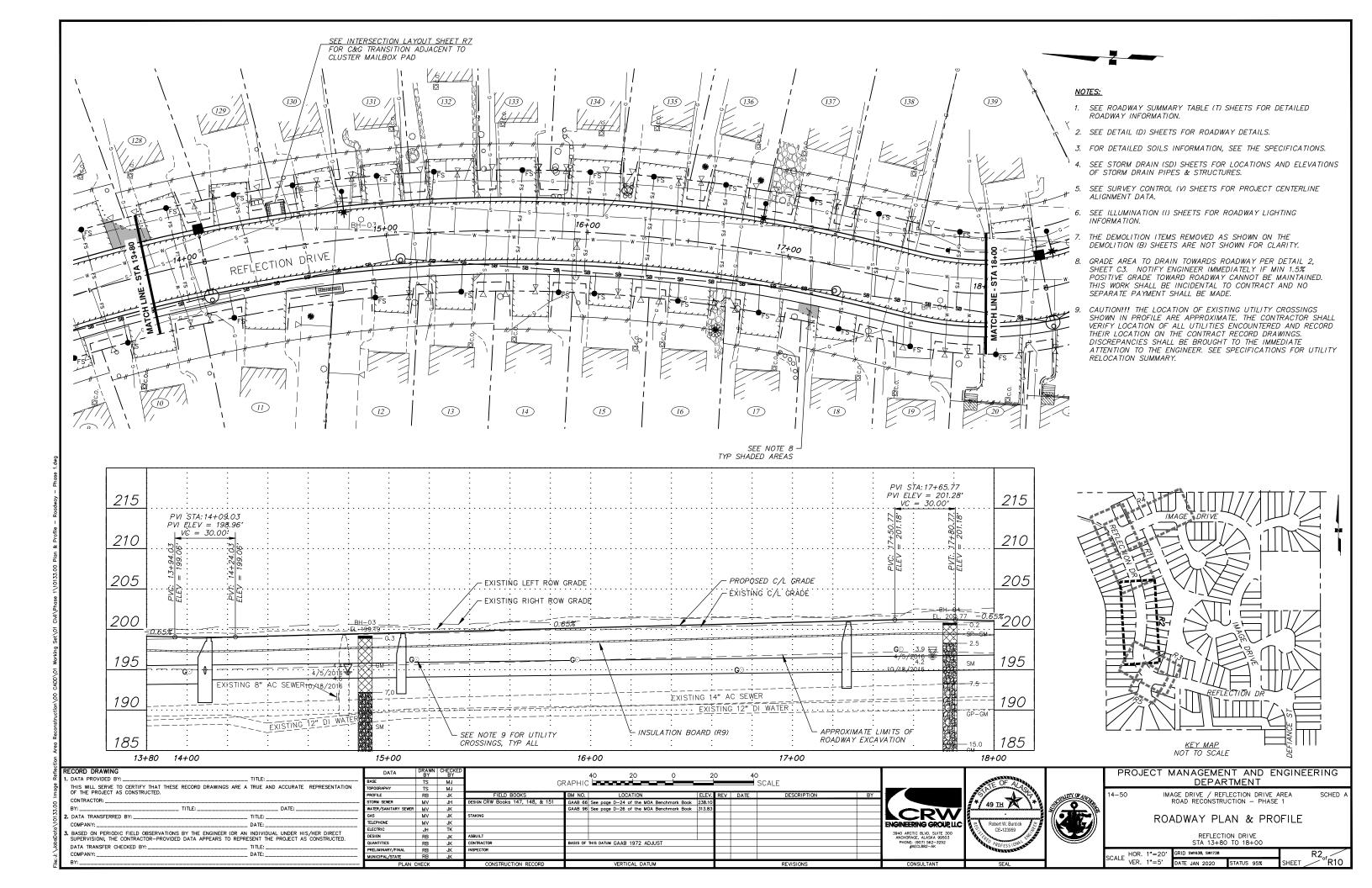
TYPICAL SECTIONS

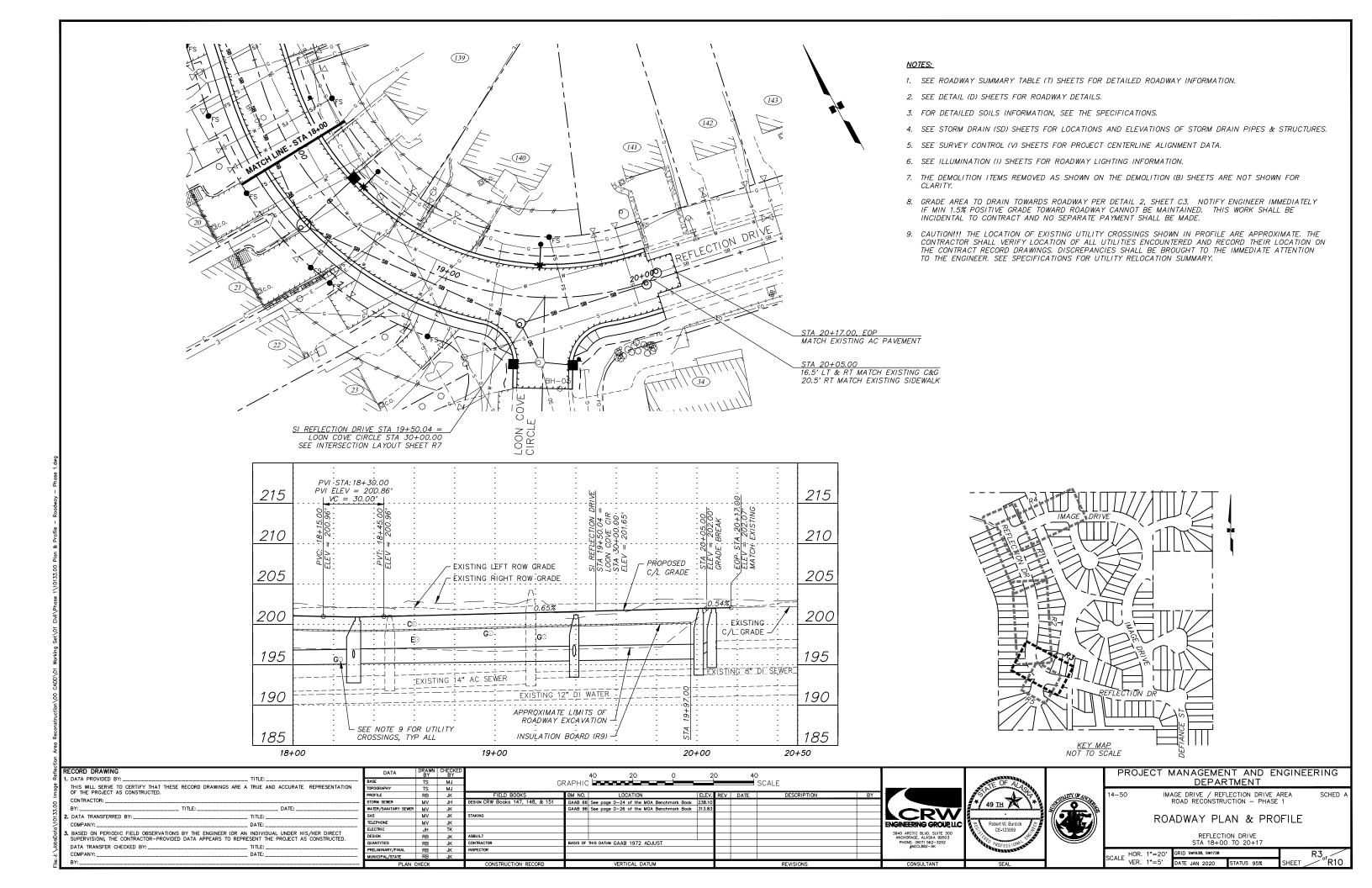
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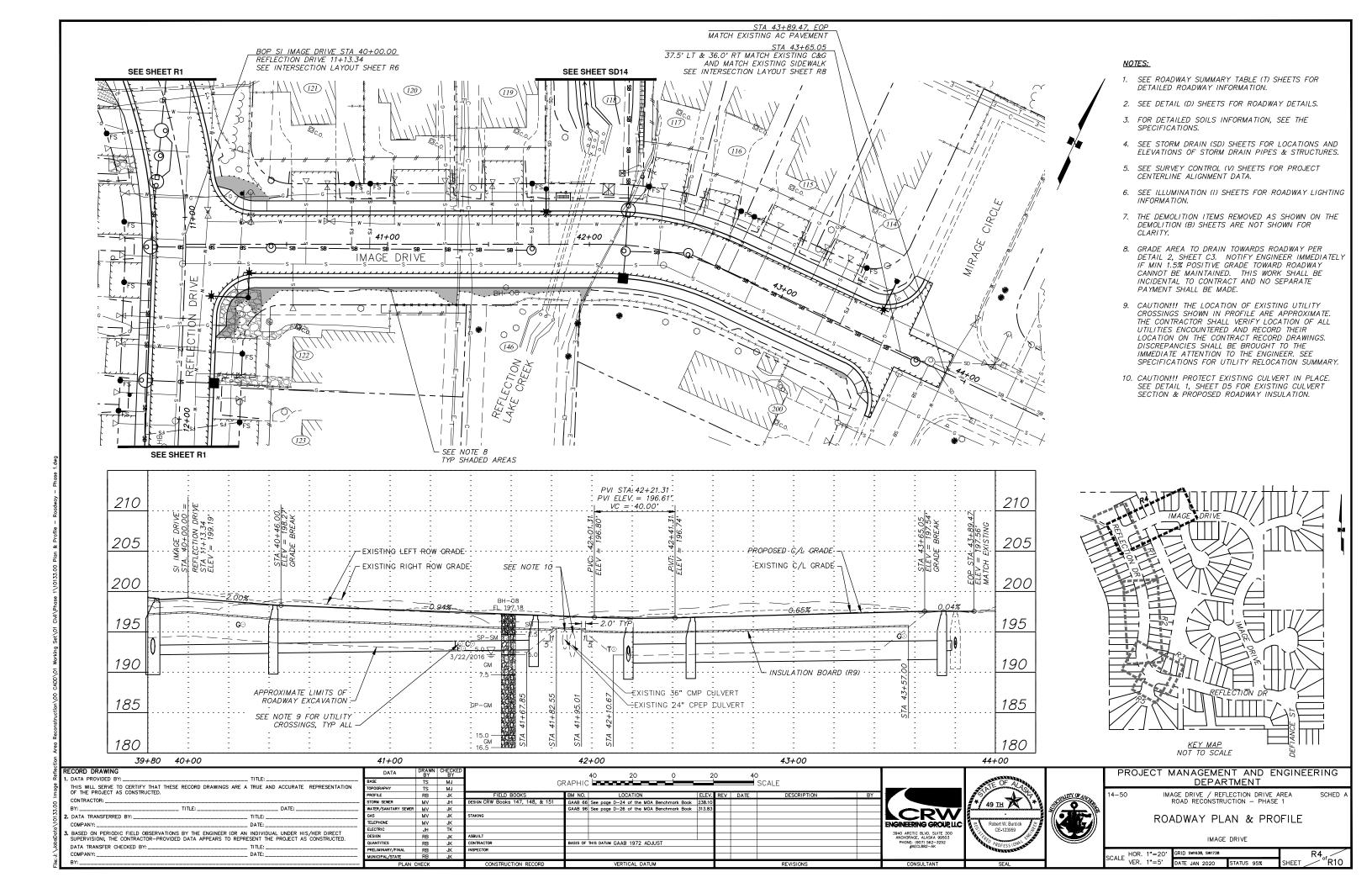
C3_{of}C3 GRID SW1638, SW1738 HOR, N/A DATE JAN 2020

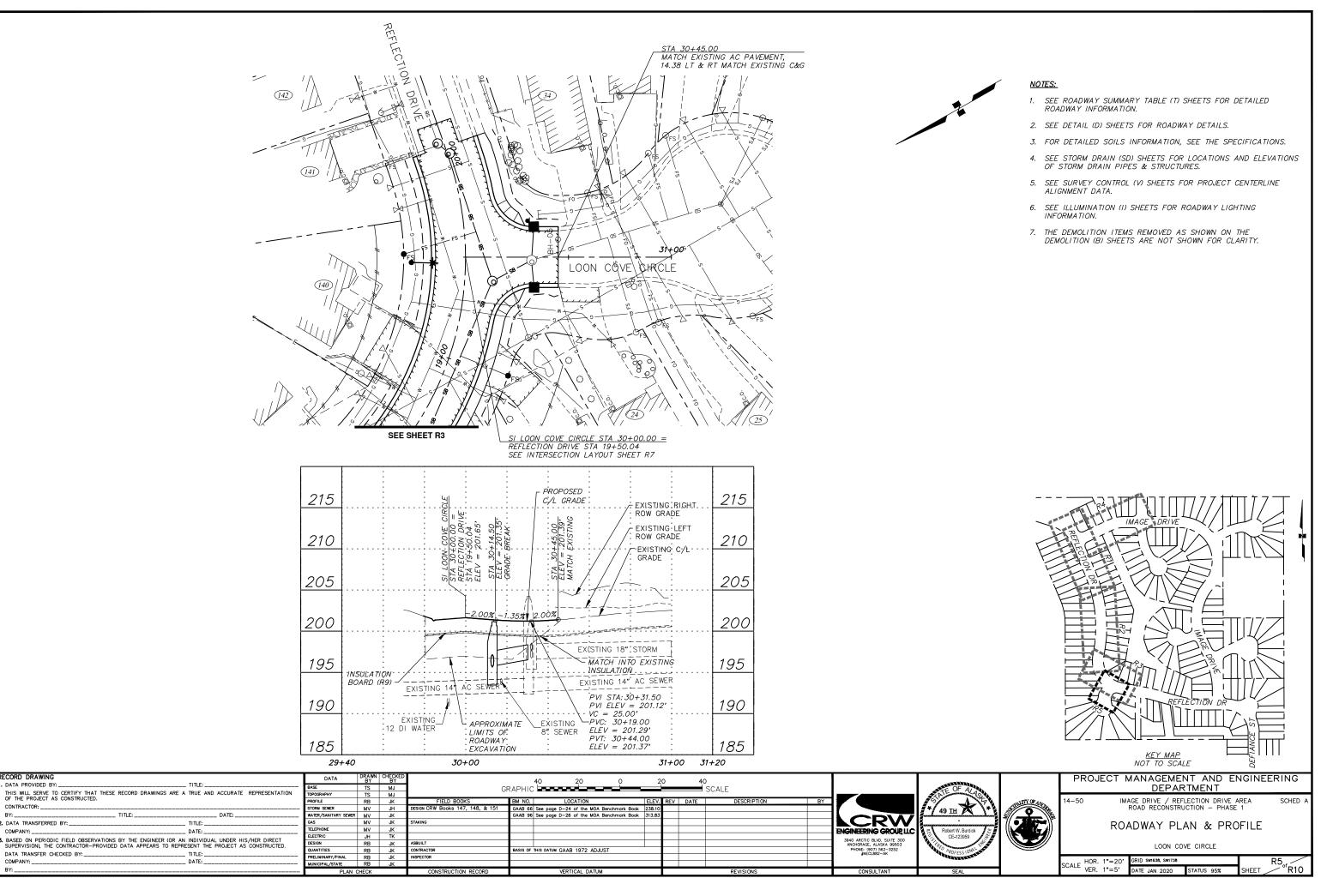
. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. SIS OF THIS DATUM GAAB 1972 ADJUST DATE:









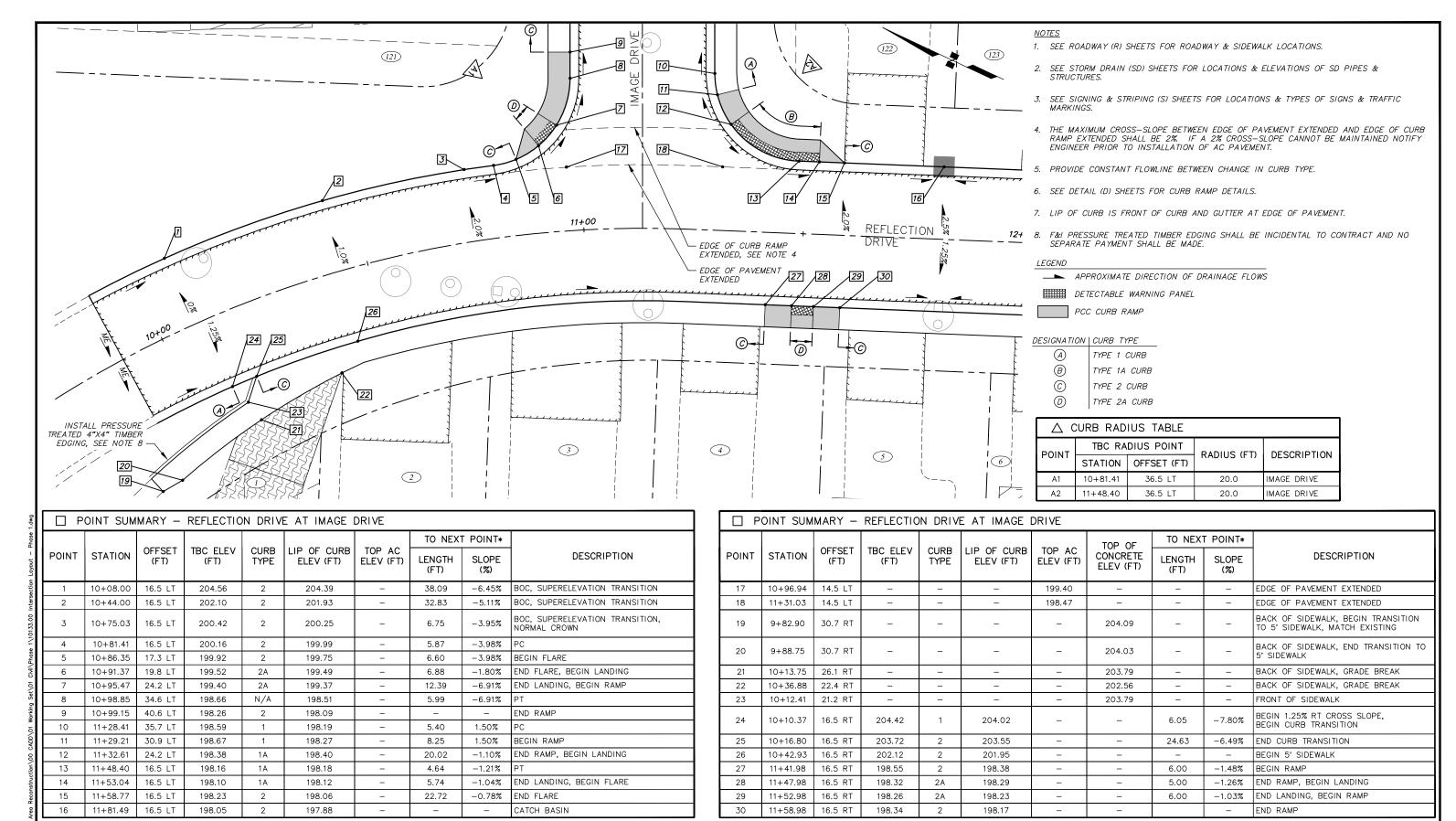


1. DATA PROVIDED BY: _

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CONTRACTOR:

COMPANY:



* LENGTH & SLOPE TO NEXT POINT IS ALONG LIP OF CURB

COMPANY:

* LENGTH & SLOPE TO NEXT POINT IS ALONG LIP OF CURB

	ECORD DRAWING		
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	OF THE PROJECT AS CONSTRUCTED.		PROF
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PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION		ELEV.	REV	DATE	DES	CRIPTION	BY] .
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MC	A Benchmark Book	238.10						1 7
WATER/SANITARY SEWER	ΜV	JK		GAAB 96	See page D-26 of the MC	A Benchmark Book	313.83						11
GAS	ΜV	JK	STAKING										1
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MUNICIPAL/STATE	RB	JK											
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PROJECT MANAGEMENT AND ENGINEERING
DEPARTMENT

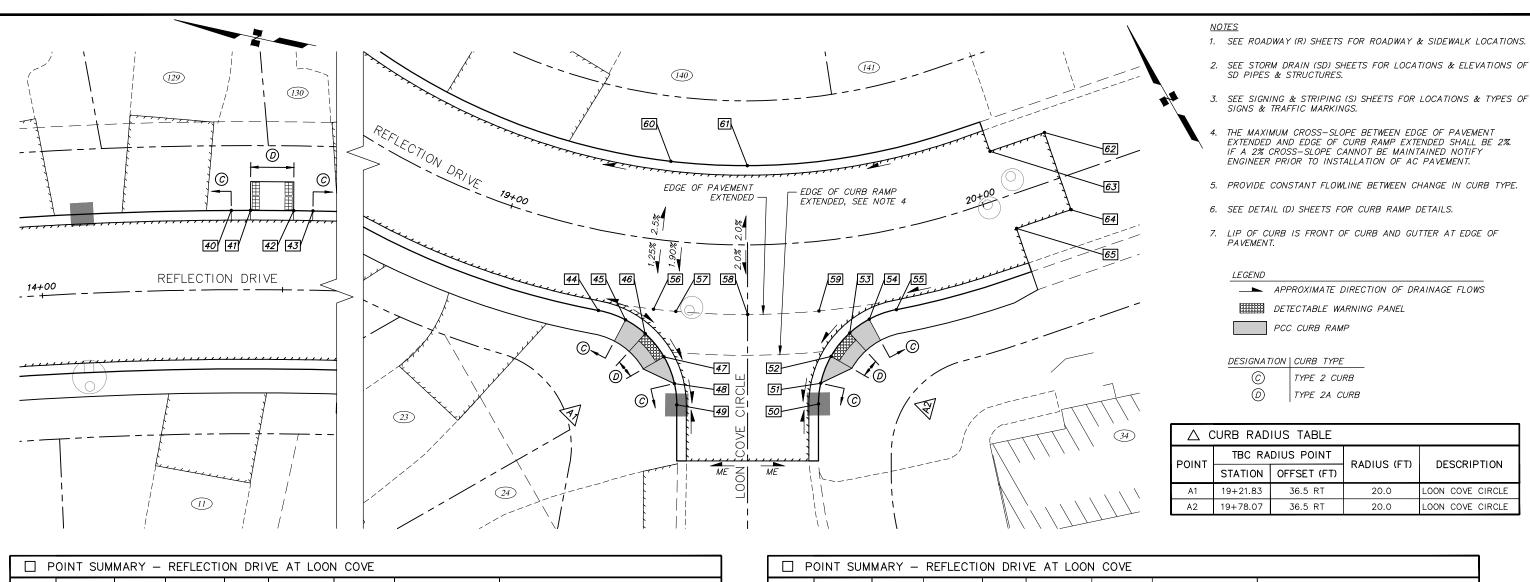
14-50 IMAGE DRIVE / REFLECTION DRIVE AREA SCHED

O IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

INTERSECTION LAYOUT

IMAGE DRIVE

	HOR.	1"=10'	GRID SW1638, SW1738				R6	./
ALE	VER.	N/A	DATE JAN 2020	STATUS 9	95%	SHEET		"R10



□ P	☐ POINT SUMMARY — REFLECTION DRIVE AT LOON COVE												
					LIP OF		TO NEXT	POINT*					
POINT	STATION	OFFSET (FT)	TBC ELEV (FT)	CURB TYPE	CURB ELEV (FT)	TOP AC ELEV (FT)	LENGTH (FT)	SLOPE (%)	DESCRIPTION				
40	14+39.41	16.5 LT	198.97	2	198.80	-	4.00	0.64%	BEGIN CURB TRANSITION				
41	14+43.32	16.5 LT	198.85	2A	198.82	_	9.00	0.64%	END CURB TRANSITION, BEGIN LANDING				
42	14+52.13	16.5 LT	198.91	2A	198.88	_	4.00	0.64%	END LANDING, BEGIN CURB TRANSITION				
43	14+56.04	16.5 LT	199.08	2	198.91	_	-	-	END CURB TRANSITION				
44	19+21.83	16.5 RT	201.45	2	201.28	-	6.60 0.70% F		PC				
45	19+27.13	17.5 RT	201.50	2	201.33	_	5.50	-0.95%	BEGIN RAMP				
46	19+31.07	19.8 RT	201.30	2A	201.27	_	6.88	-1.80%	END RAMP, BEGIN LANDING				
47	19+34.93	24.2 RT	201.18	2A	201.15	1	6.60	-2.72%	END LANDING, BEGIN FLARE				
48	19+37.20	29.5 RT	201.14	2	200.97	1	4.91	-2.66%	END FLARE				
49	19+37.90	33.9 RT	201.01	2	200.84	_	ı	_	PT, CATCH BASIN				
50	19+62.01	33.8 RT	201.28	2	201.11	_	4.80	2.62%	PC, CATCH BASIN				
51	19+62.71	29.5 RT	201.40	2	201.23	-	6.60	2.62%	BEGIN FLARE				
52	19+64.97	24.2 RT	201.44	2A	201.41	1	6.88	0.69%	END FLARE, BEGIN LANDING				
53	19+68.83	19.8 RT	201.48	2A	201.45	ı	5.50	0.69%	END LANDING, BEGIN RAMP				
54	19+72.78	17.5 RT	201.66	2	201.49	1	6.60	0.69%	END RAMP				
55	19+78.07	16.5 RT	201.71	2	201.54	_	_		PT				

□ P	☐ POINT SUMMARY — REFLECTION DRIVE AT LOON COVE											
					LIP OF		TO NEXT	POINT*				
POINT	STATION	OFFSET (FT)	TBC ELEV (FT)	THE COURSE FLEVI		SLOPE (%)	DESCRIPTION					
56	19+32.10	14.5 RT	_		-	201.35			EDGE OF PAVEMENT EXTENDED, BEGIN LANE SLOPE TRANSITION			
57	19+36.34	14.5 RT	-		-	201.28	E		EDGE OF PAVEMENT EXTENDED			
58	19+50.00	14.5 RT	-		-	201.35	201.35 –		EDGE OF PAVEMENT EXTENDED, END LANE SLOPE TRANSITION			
59	19+63.56	14.5 RT	-		-	201.44	ı	_	EDGE OF PAVEMENT EXTENDED			
60	19+32.10	16.5 LT	201.34		201.34	=	16.14	1.17%	BEGIN LANE SLOPE TRANSITION			
61	19+50.04	16.5 LT	201.53		201.53	1	ì	_	END LANE SLOPE TRANSITION			
62	20+17.00	10.0 LT	-		-	201.82	18.14	_	MATCH EXISTING			
63	20+05.00	10.0 LT	_		_	201.75	01.75 19.14		MATCH EXISTING			
64	20+17.00	7.0 RT	_		_	202.02	20.14	_	MATCH EXISTING			
65	20+05.00	7.0 RT	_		_	201.96	_	_	MATCH EXISTING			

^{*} LENGTH & SLOPE TO NEXT POINT IS ALONG LIP OF CURB

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í	RI	CORD DRAWING				Γ
3	1.	DATA PROVIDED BY:		TITLE:		ŀ
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		BY:	_ TITLE:	DATE:		İ
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١	3.	BASED ON PERIODIC FIELD OBSERVATION: SUPERVISION, THE CONTRACTOR-PROVIDE				ŀ
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* LENGTH & SLOPE TO NEXT POINT IS ALONG LIP OF CURB

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PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION		ELEV.	REV	DATE	DESCRIPTION	BY	
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA E	Benchmark Book	238.10					1 7
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA E	lenchmark Book	313.83					11.
GAS	MV	JK	STAKING									
TELEPHONE	MV	JK										ENGI
ELECTRIC	JH	TK										
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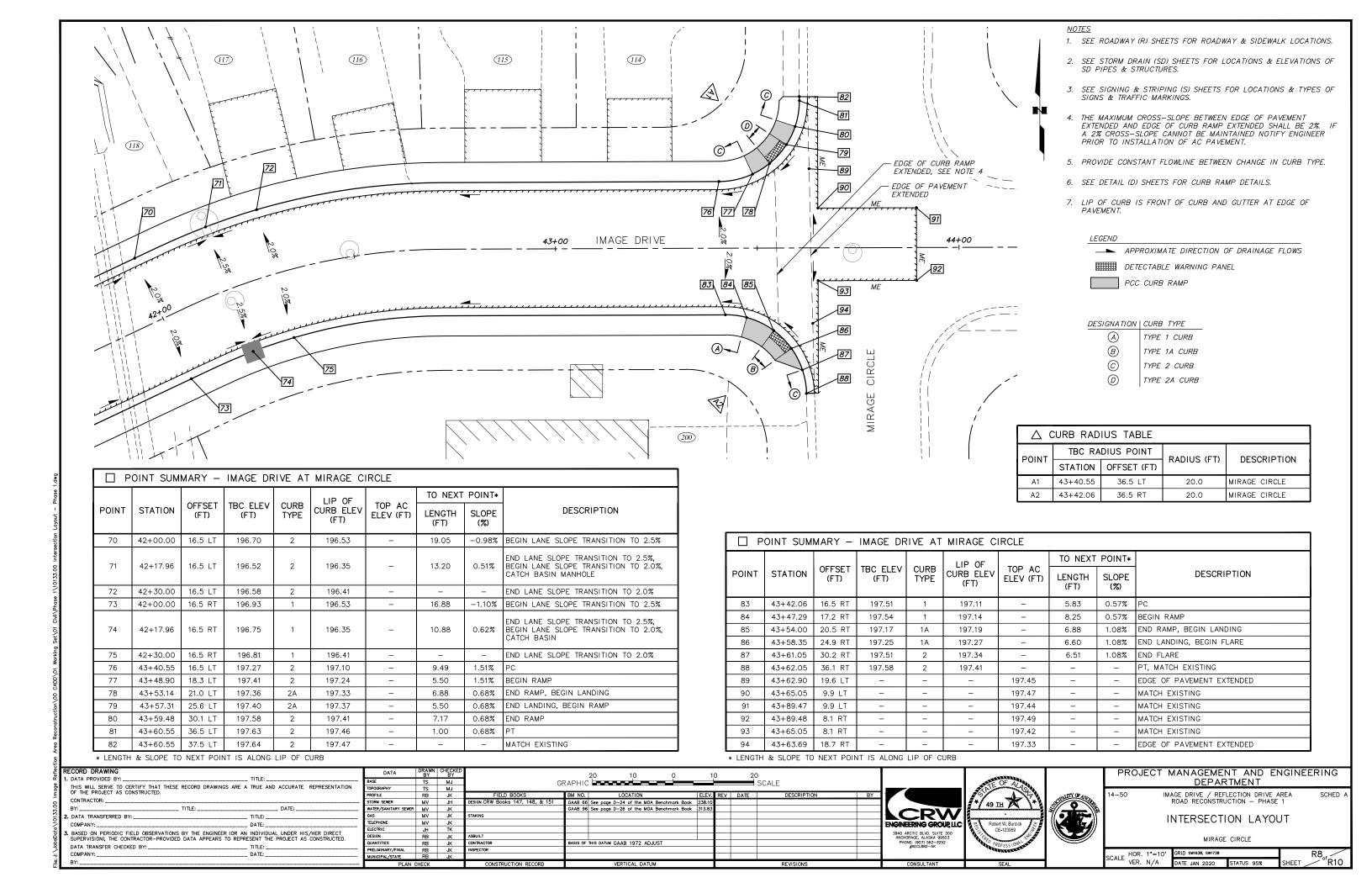
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

INTERSECTION LAYOUT

REFLECTION DRIVE & CLUSTER MAILBOX

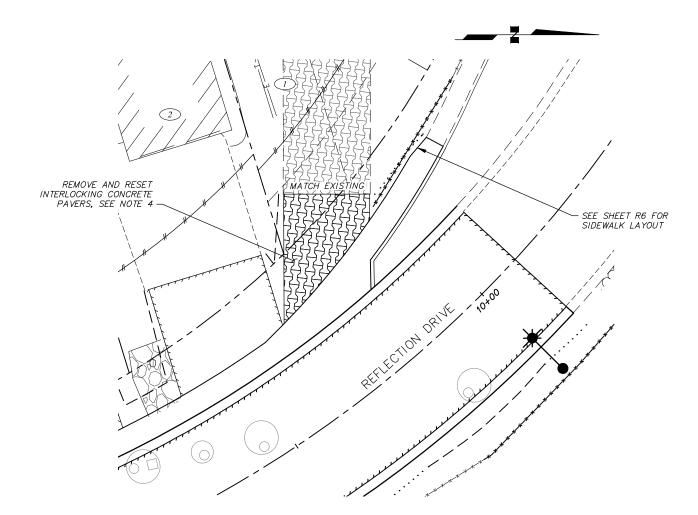
	HOR.	1"=10'	GRID SW1638, SW1738		R7./
ALE	VER.	N/A	DATE JAN 2020	STATUS 95%	SHEET OF R10



- 1. SIDEWALK CROSS SLOPE SHALL BE 2% MAXIMUM AT DRIVEWAYS.
- 2. SEE 20.28 DRIVEWAY RECONSTRUCTION TABLE (T) SHEETS FOR DRIVEWAY INFORMATION.
- 3. SEE DRIVEWAY DETAILS (D) SHEETS FOR MORE INFORMATION.
- 4. SEE SECTION 30.12 IN THE SPECIAL PROVISIONS FOR MORE INFORMATION.
- 5. RECONSTRUCT DRIVEWAY WITH COLORED CONCRETE THAT MATCHES EXISTING COLOR PER THE SPECIAL PROVISIONS, THIS WORK SHALL BE PAID UNDER 30.10 COLORED CONCRETE (6" THICK, RED, BROOM FINISH).
- 6. CONTRACTOR SHALL VERIFY TIMBER JOINT LAYOUT IN THE FIELD WITH ENGINEER PRIOR TO INSTALLATION.

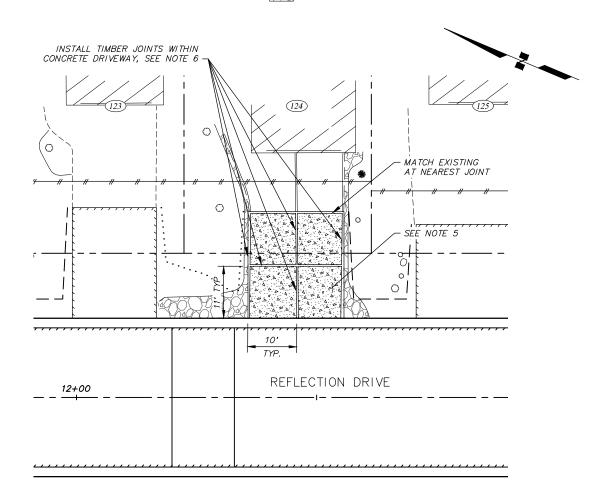
LEGEND

COLORED CONCRETE (6" THICK, RED, BROOM FINISH)



PARCEL 1 DRIVEWAY RECONSTRUCTION PLAN

SCALE: GRAPHIC



PARCEL 124 DRIVEWAY RECONSTRUCTION PLAN
SCALE: GRAPHIC

	ECORD DRAWING		Г
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VATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA	Benchmark Book	313.83					ш.
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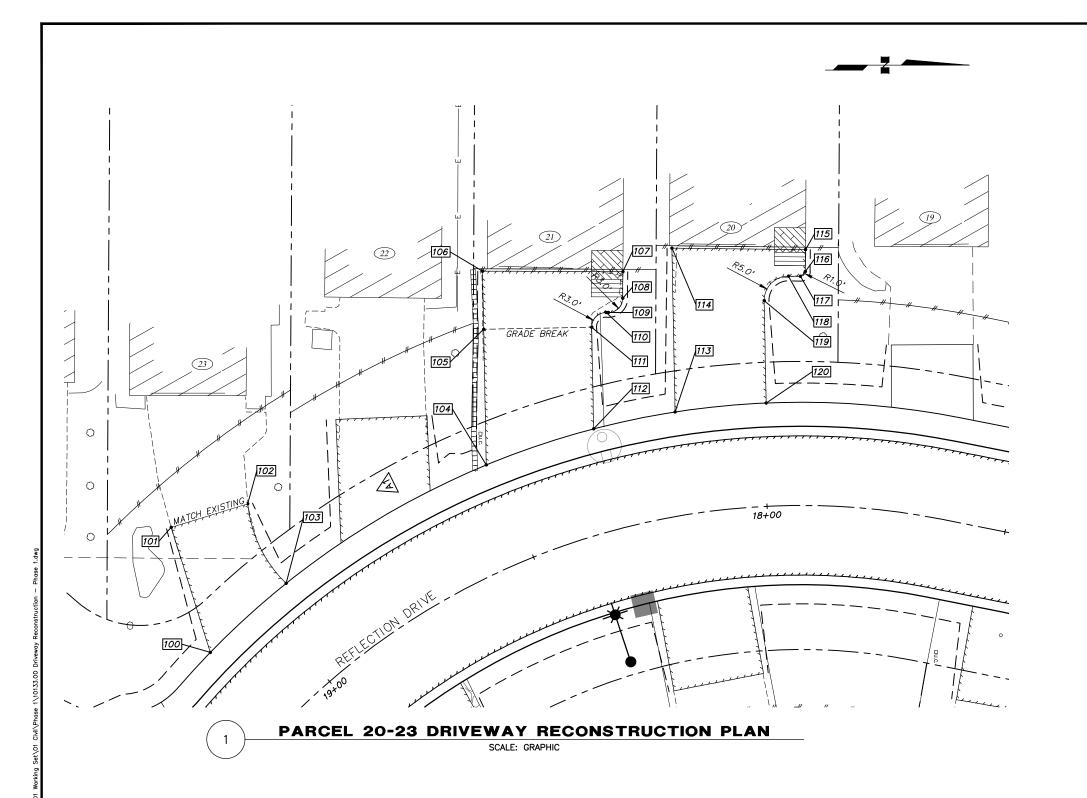
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

4-50 IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

DRIVEWAY RECONSTRUCTION PLANS

SCALE HOR. 1"=10" GRID 591638, 591738 R9

DATE JAN 2020 STATUS 95% SHEET R10



<u>NOTES</u>

- 1. SIDEWALK CROSS SLOPE SHALL BE 2% MAXIMUM AT DRIVEWAYS.
- SEE 20.28 DRIVEWAY RECONSTRUCTION TABLE (T) SHEETS FOR DRIVEWAY INFORMATION.
- 3. SEE DRIVEWAY DETAILS (D) SHEETS FOR MORE INFORMATION.

Р	OINT SUM	MARY – PAF	RCELS 20-	-23
POINT	STATION	STATION OFFSET (FT) ELEV (FT)		DESCRIPTION
100	19+12.97	21.5 RT	201.47	BACK OF SIDEWALK
101	19+02.98	45.9 RT	204.76	MATCH EXISTING
102	18+91.00	39.5 RT	204.28	MATCH EXISTING
103	18+94.29	21.5 RT	201.35	BACK OF SIDEWALK
104	18+51.76	21.5 RT	201.07	BACK OF SIDEWALK
105	18+43.95	48.1 RT	203.56	GRADE BREAK
106	18+41.21	59.6 RT	204.71	MATCH EXISTING
107	18+20.60	52.1 RT	204.32	MATCH EXISTING
108	18+21.39	46.7 RT	203.88	PC, R=3.0'
109	18+24.11	44.4 RT	203.51	PT
110	18+24.45	44.5 RT	203.47	PC, R=3.0'
111	18+27.25	42.2 RT	203.09	PT, GRADE BREAK
112	18+31.11	21.5 RT	200.98	BACK OF SIDEWALK
113	18+15.95	21.5 RT	201.02	BACK OF SIDEWALK
114	18+12.60	55.4 RT	205.12	MATCH EXISTING
115	17+92.21	53.3 RT	205.20	MATCH EXISTING
116	17+92.24	48.7 RT	204.71	PC, R=1.0'
117	17+93.00	47.7 RT	204.55	PT
118	17+94.89	47.8 RT	204.28	PC, R=5.0'
119	17+98.88	42.8 RT	203.42	PT
120	17+99.27	21.5 RT	201.13	BACK OF SIDEWALK

	RIVEWAY	RADIUS TAE	BLE	
POINT	TBC RA	DIUS POINT	RADIUS (FT)	DESCRIPTION
POINT	STATION OFFSET (FT)		KADIOS (FI)	DESCRIPTION
A1	1 18+71.46 26.8 RT		27.0	PARCEL 23

ш	RECORD DRAWING		
ı	1. DATA PROVIDED BY:	_ TITLE:	ВА
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STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the M	OA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the M	OA Benchmark Book	313.83					ш
GAS	MV	JK	STAKING									H
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PRELIMINARY/FINAL	RB	JK	INSPECTOR									1
MUNICIPAL/STATE	RB	JK										
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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

DRIVEWAY RECONSTRUCTION PLANS

0415	HOR.	1"=10'	GRID SW1638, SW1738			R10.
CALE	VER.	N/A	DATE JAN 2020	STATUS 95%	SHEET	° [™] R10

RECONSTRUCT DRIVEWAY

SHEET	PARCEL	CENTER REFERE		DRIVEWAY WIDTH AT CURB/ROW	SKEW ANGLE	LANDING LENGTH	LANDING GRADE	TOTAL DISTANCE	EXISTING GRADE	PROPOSED GRADE	SURFACE TYPE ON PROPERTY	CONSTRUCT PER DETAIL	REMARKS
		STATION	OFFSET	(FT) [´]	(DEGREES)	(FT)	GRADE	(FT)	GRADE	GRADE	ON PROPERTY		
R1	1	10+29.67	RT	18	125	10.4	4.0%	27.6	2.8%	2.9%	CONCRETE	DETAIL 4, SHEET D2	SEE SHEET R9 FOR DRIVEWAY LAYOUT
R1	2	10+53.29	RT	24.5	105	5.1	3.0%	25.2	8.2%	7.7%	ASPHALT	DETAIL 4, SHEET D2	
R1	3	10+95.64	RT	25	96	5.0	1.9%	26.4	10.0%	8.8%	ASPHALT	DETAIL 4, SHEET D2	
R1	4	11+32.21	RT	17.5	90	5.0	1.5%	20.5	9.5%	8.7%	ASPHALT	DETAIL 4, SHEET D2	
R1	122	11+67.77	LT	18	-90	0.0	N/A	20.5	7.5%	5.6%	ASPHALT	DETAIL 5, SHEET D2	
R1	5	11+70.09	RT	17.5	90	5.0	2.0%	21.0	10.5%	10.5%	ASPHALT	DETAIL 4, SHEET D2	
R1	123	12+07.87	LT	17.5	-90	0.0	N/A	23.0	4.5%	3.0%	ASPHALT	DETAIL 5, SHEET D2	
R1	6	12+07.98	RT	17.5	90	5.0	1.5%	22.0	12.3%	11.4%	ASPHALT	DETAIL 4, SHEET D2	
R1	124	12+45.71	LT	20	-90	0.0	N/A	22.2	3.6%	2.4%	RED CONCRETE	DETAIL 5, SHEET D2	SEE SHEET R9 FOR DRIVEWAY LAYOUT
R1	7	12+51.75	RT	17.5	90	5.0	1.5%	19.5	10.8%	9.0%	ASPHALT	DETAIL 4, SHEET D2	
R1	125	12+82.23	LT	23	-90	0.0	N/A	19.5	4.5%	2.8%	ASPHALT	DETAIL 5, SHEET D2	
R1	8	12+83.94	RT	17	90	5.0	1.5%	19.5	10.6%	8.3%	ASPHALT	DETAIL 4, SHEET D2	
R1	126	13+21.60	LT	17	-90	0.0	2.0%	20.2	4.1%	2.0%	ASPHALT	DETAIL 5, SHEET D2	
R1	9	13+28.97	RT	22.5	90	5.0	1.5%	19.5	12.9%	9.6%	ASPHALT	DETAIL 4, SHEET D2	
R1	127	13+55.92	LT	22	-94	0.0	N/A	24.3	4.0%	1.5%	ASPHALT	DETAIL 5, SHEET D2	
R1	10	13+75.47	RT	21	93	5.0	1.5%	22.6	11.7%	10.0%	ASPHALT	DETAIL 4, SHEET D2	
						0.0							
R2	128	13+94.52	LT	18	-98	0.0	N/A	19.4	5.3%	4.4%	ASPHALT	DETAIL 5, SHEET D2	
R2	129	14+25.75	LT	17.5	-84	0.0	N/A	19.4	7.7%	5.5%	ASPHALT	DETAIL 5, SHEET D2	
R2	11	14+37.33	RT	20	101	5.1	1.4%	22.3	11.3%	11.3%	ASPHALT	DETAIL 4, SHEET D2	
R2	130	14+69.47	LT	17	-96	0.0	N/A	19.4	5.0%	6.0%	ASPHALT	DETAIL 5, SHEET D2	
R2	131	15+00.27	LT	17	-92	0.0	N/A	19.5	7.0%	7.3%	ASPHALT	DETAIL 5, SHEET D2	
R2	12	15+02.42	RT	17	98	5.0	1.9%	21.8	9.9%	10.0%	ASPHALT	DETAIL 4, SHEET D2	
R2	132	15+33.18	LT	22.5	-90	0.0	N/A	19.5	5.2%	4.2%	ASPHALT	DETAIL 5, SHEET D2	
R2	13	15+33.53	RT	18.5	93	5.0	1.5%	22.1	11.5%	10.3%	ASPHALT	DETAIL 4, SHEET D2	
R2	133	15+65.46	LT	18	-92	0.0	N/A	19.5	9.2%	9.2%	ASPHALT	DETAIL 5, SHEET D2	<u> </u>
R2	14	15+72.41	RT	18	90	5.0	1.5%	26.1	9.4%	9.5%	ASPHALT	DETAIL 4, SHEET D2	<u> </u>
R2	134	16+02.81	LT	24	-90	0.0	N/A	19.5	12.4%	11.2%	ASPHALT	DETAIL 5, SHEET D2	
R2	15	16+13.42	RT	21	90	5.0	1.5%	19.5	13.6%	12.6%	ASPHALT	DETAIL 4, SHEET D2	
R2	135	16+33.33	LT	23.5	-88	0.0	N/A	19.5	10.8%	9.7%	ASPHALT	DETAIL 5, SHEET D2	
R2	16	16+53.48	RT	20	88	5.0	1.5%	19.5	10.8%	10.2%	ASPHALT	DETAIL 4, SHEET D2	<u> </u>
R2	136	16+65.41	LT	17.5	-86	0.0	N/A	19.5	8.9%	8.6%	ASPHALT	DETAIL 5, SHEET D2	<u> </u>
R2	17	16+91.49	RT	19	87	5.0	1.5%	24.8	10.8%	9.4%	ASPHALT	DETAIL 4, SHEET D2	<u> </u>
R2	137	17+08.37	LT	17.5	-90 84	0.0	N/A	19.5	7.7%	7.0%	ASPHALT	DETAIL 5, SHEET D2 DETAIL 4. SHEET D2	
R2	18	17+29.49	RT	19		5.0	1.6%	19.4	8.9%	7.2%	ASPHALT	,	
R2	138	17+41.43	LT	24.5	-90 -70	0.0	N/A	19.5	7.6%	6.2%	ASPHALT	DETAIL 4 SHEET D2	
R2	19	17+68.13	RT	17	79	5.1	1.5%	19.2	11.9%	11.0%	CONCRETE	DETAIL 4, SHEET D2	
	20	10 1 00 07	D.T.	VARIEC	05	E 0	2.0%	77.0	17.007	17.007	ACDUALT	DETAIL A CUEET DO	CEE CHEET DAG FOR RRIVEWAY LAYOUT
R3	20	18+08.03	RT	VARIES	95	5.0	2.0% N/A	37.9	13.6%	13.0%	ASPHALT	DETAIL 4, SHEET D2 DETAIL 5, SHEET D2	SEE SHEET R10 FOR DRIVEWAY LAYOUT
R3	139	18+16.13	LT	19	-90 110	-16.5	· · · · · · · · · · · · · · · · · · ·	19.5	9.2%	9.3%	ASPHALT	·	CEE CHEET DAD FOR DRIVEWAY LAYOUT
R3	21	18+43.21	RT RT	VARIES	110	5.3 5.7	1.8%	41.6	9.7%	VARIES	ASPHALT	DETAIL 4, SHEET D2 DETAIL 4, SHEET D2	SEE SHEET R10 FOR DRIVEWAY LAYOUT SEE SHEET R10 FOR DRIVEWAY LAYOUT
R3	22	18+74.69		19	122		1.0% N/A	26.0	14.4%	14.2%	ASPHALT	DETAIL 4, SHEET D2	SEE SHEET KIN FOR DRIVEWAT LATUUT
R3	140	18+92.26	LT	27	-81 110	-16.7 5.6		19.3	6.6%	7.0%	ASPHALT	DETAIL 5, SHEET D2	SEE SHEET DIO FOR DRIVEWAY LAYOUT
R3	23	19+06.94	RT	16.5	119	5.6	1.1%	28.6	13.6%	13.5%	ASPHALT	DETAIL 4, SHEET DZ	SEE SHEET R10 FOR DRIVEWAY LAYOUT

RECONSTRUCT DRIVEWAY NOTES:

- 1. "LANDING LENGTH" BEGINS AT THE BACK OF CURB & GUTTER.
- 2. "LANDING GRADE" IS THE GRADE OF THE LANDING FROM THE BACK OF CURB & GUTTER TO THE END OF LANDING.
- 3. "SKEW ANGLE" ("+" IS CLOCKWISE AND "-" IS COUNTER CLOCKWISE) IS MEASURED FROM PROJECT CENTERLINE WITH O DEGREES ALIGNED ALONG INCREASING STATIONS.
- 4. "TOTAL DISTANCE" IS THE LIMIT OF RECONSTRUCTION BEGINNING AT THE BACK OF CURB & GUTTER.
- 5. "PROPOSED GRADE" IS APPROXIMATE GRADE FROM THE END OF THE LANDING TO THE LIMIT OF RECONSTRUCTION. ACTUAL CONSTRUCTION GRADE MAY VARY.
- 6. WIDTHS, LENGTHS & GRADES PRESENTED IN THE DRIVEWAY SUMMARY TABLE ARE MEASURED ALONG SKEW ANGLE AND MAY NOT BE PERPENDICULAR TO ROADWAY CENTERLINE ALIGNMENT.
- 7. SEE SHEET T2 FOR RECONSTRUCT DRIVEWAY SUMMARY TABLE CONTINUED.

RE	CORD DRAWING			
1.	DATA PROVIDED BY:		TITLE:	
	THIS WILL SERVE TO CERTI		RAWINGS ARE A TRUE AND ACCUR	RATE REPRESENTATION
	CONTRACTOR:			
	BY:	TITLE:	DATE	
2.	DATA TRANSFERRED BY:		TITLE:	
	COMPANY:		DATE:	
			NGINEER (OR AN INDIVIDUAL UNDE PEARS TO REPRESENT THE PROJEC	

_ DATE: _

DATA TRANSFER CHECKED BY: ____

COMPANY:

DATA	DRAWN BY	CHECKED								
BASE	TS	MJ								
TOPOGRAPHY	TS	MJ								
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10				
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83				
GAS	MV	JK	STAKING							
TELEPHONE	MV	JK								
ELECTRIC	JH	TK								
DESIGN	RB	JK	ASBUILT							
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST					
PRELIMINARY/FINAL	RB	JK	INSPECTOR							
MUNICIPAL/STATE	RB	JK								
PLAN	CHECK		CONSTRUCTION RECORD		VERTICAL DATUM				REVISIONS	







PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

ROADWAY SUMMARY TABLES

GRID SW1638, SW1738 SCALE HOR. N/A DATE JAN 2020 STATUS 95%

RECONSTRUCT DRIVEWAY

SHEET	PARCEL	CENTER REFERE		DRIVEWAY WIDTH AT CURB/ROW	SKEW ANGLE (DEGREES)	LANDING LENGTH (FT)	LANDING GRADE	TOTAL DISTANCE (FT)	EXISTING GRADE		SURFACE TYPE ON PROPERTY	CONSTRUCT PER DETAIL	REMARKS
		STATION	OFFSET	(FT)	(DEGREES)	(F1)		(F1)					
R4	121	40+63.46	LT	22	90	5.0	1.5%	19.5	5.8%	6.0%	ASPHALT	DETAIL 5, SHEET D2	
R4	120	41+16.94	LT	28	90	5.0	1.5%	20.5	4.3%	4.6%	ASPHALT	DETAIL 5, SHEET D2	
R4	119	41+57.70	LT	19	90	5.0	1.5%	24.9	4.5%	5.3%	ASPHALT	DETAIL 5, SHEET D2	
R4	117	42+32.73	LT	17	92	5.0	1.5%	28.0	3.2%	4.5%	ASPHALT	DETAIL 5, SHEET D2	
R4	116	42+57.96	LT	15.5	82	5.0	1.4%	19.4	5.5%	5.7%	ASPHALT	DETAIL 5, SHEET D2	
R4	115	42+87.13	LT	19	90	5.0	1.5%	23.0	5.2%	6.5%	ASPHALT	DETAIL 5, SHEET D2	
R4	114	43+20.95	LT	16	90	5.0	1.5%	20.7	4.9%	5.2%	ASPHALT	DETAIL 5, SHEET D2	
R5	24	30+56.25	RT	18.2	90	0.0	N/A	6.9	12.6%	12.6%	ASPHALT		REPAVE ONLY, NO STRUCTURAL SECTION

RECONSTRUCT DRIVEWAY NOTES:

- 1. "LANDING LENGTH" BEGINS AT THE BACK OF CURB & GUTTER.
- 2. "LANDING GRADE" IS THE GRADE OF THE LANDING FROM THE BACK OF CURB & GUTTER TO THE END OF LANDING.
- 3. "SKEW ANGLE" ("+" IS CLOCKWISE AND "-" IS COUNTER CLOCKWISE) IS MEASURED FROM PROJECT CENTERLINE WITH O DEGREES ALIGNED ALONG INCREASING STATIONS.
- 4. "TOTAL DISTANCE" IS THE LIMIT OF RECONSTRUCTION BEGINNING AT THE BACK OF CURB & GUTTER.
- 5. "PROPOSED GRADE" IS APPROXIMATE GRADE FROM THE END OF THE LANDING TO THE LIMIT OF RECONSTRUCTION. ACTUAL CONSTRUCTION GRADE MAY VARY.
- 6. WIDTHS, LENGTHS & GRADES PRESENTED IN THE DRIVEWAY SUMMARY TABLE ARE MEASURED ALONG SKEW ANGLE AND MAY NOT BE PERPENDICULAR TO ROADWAY CENTERLINE ALIGNMENT.

30.02

P.C.C. CURB AND GUTTER (ALL TYPES)										
SHEET	STATION TO STATION	OFFSET (FT)	LENGTH (FT)	REMARKS						
R1	BOP TO 13+80	LT	380	INCLUDES SIDE STREETS & DRIVEWAYS						
R1	BOP TO 13+80	RT	391	INCLUDES SIDE STREETS & DRIVEWAYS						
R2	13+80 TO 18+00	LT	424	INCLUDES DRIVEWAYS						
R2	13+80 TO 18+00	RT	416	INCLUDES DRIVEWAYS						
R3	18+00 TO 20+05	LT	183	INCLUDES SIDE STREETS & DRIVEWAYS						
R3	18+00 TO 20+05	RT	243	INCLUDES SIDE STREETS & DRIVEWAYS						
R4	40+35 TO EOP	LT	343	IMAGE DRIVE						
R4	40+35 TO EOP	RT	331	IMAGE DRIVE						

PCC CURB & GUTTER (ALL TYPES) NOTES:

1. SEE INTERSECTION LAYOUT SHEETS AND DRIVEWAY RECONSTRUCTION SHEETS R6-R8 FOR LOCATIONS AND TYPES OF CURB AND GUTTER.

30.04

RECORD DRAWING

1. DATA PROVIDED BY: _

P.C.C. C	P.C.C. CURB RAMP (6" THICK) & DETECTABLE WARNINGS										
SHEET	APPX	OFFSET	CURB RAMP	DETECTABLE	CURB RAMP	REMARKS					
SHEET	STATION	(FT)	AREA (SY)	WARNING AREA (SF)	TYPE						
R1	10+94	LT	14	12	PARALLEL	IMAGE DRIVE					
R1	11+41	LT	17	44	PARALLEL	IMAGE DRIVE					
R2	11+50	RT	9	10	PARALLEL	REFLECTION DRIVE					
R3	19+33	RT	7	12	PARALLEL	LOON COVE CIRCLE					
R3	19+67	RT	7	12	PARALLEL	LOON COVE CIRCLE					
R4	43+55	LT	12	12	PARALLEL	MIRAGE CIRCLE					
R4	43+56	RT	8	12	PARALLEL	MIRAGE CIRCLE					

PCC CURB RAMP & DETECTABLE WARNING NOTES:

1. SEE INTERSECTION LAYOUT SHEETS R6-R8 FOR LOCATIONS OF CURB RAMPS AND DETECTABLE WARNINGS.

SPECIA	L FILL GRADING	TABLE		
SHEET	APPROX BEGIN STATION	APPROX END STATION	OFFSET	REMARKS
R1	12+17	12+36	LT	
R1	12+94	13+13	LT	
R1	13+30	13+45	LT	
R1	13+67	13+86	LT	
R2	17+10	17+20	RT	
R4	40+15	40+66	RT	IMAGE DRIVE
R4	40+16	40+42	LT	IMAGE DRIVE
R4	40+86	42+01	RT	IMAGE DRIVE
R4	43+32	43+46	RT	IMAGE DRIVE

SPECIAL FILL GRADING NOTES:

- 1. SPECIAL FILL GRADING SHALL BE PER DETAIL 2, SHEET C3.
- 2. LOCATIONS ARE APPROXIMATE, CONTRACTOR SHALL MODIFY LOCATIONS IN THE FIELD PER THE DIRECTION OF THE ENGINEER OR AS NECESSARY TO PROVIDE POSITIVE DRAINAGE TOWARD ROADWAY. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.

PROJECT MANAGEMENT AND ENGINEERING DESIGN CRW Books 147, 148, & 151 GAB 66 See page D-24 of the MOA Benchmark Book | 238.10 | PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT 14-50 IMAGE DRIVE / REFLECTION DRIVE AREA SCHED / ROAD RECONSTRUCTION - PHASE 1

GAB 66 See page D-24 of the MOA Benchmark Book 238.10 CRV 49 TH

GAB 96 See page D-26 of the MOA Benchmark Book 313.83

GAB 97 See page D-26 of the MOA Benchmark Book 313.83

ROAD RECONSTRUCTION — FINASE 1

ROAD RECONSTRUCTION — FINASE 1

ROAD RECONSTRUCTION — FINASE 1

NONDWITT SOMMINANT TRIBLES

CALE HOR. N/A GRID SW1638, SW1738 T2

DATE JAN 2020 STATUS 95% SHEET

CONTRACTOR:

BY:

DATE:

DATE:

DATE:

COMPANY:

DATE:

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.

ENGINEERING GROUPLIC

3940 ARCITIC BLVD. SUITE 300
ARCHORAGE, ALASKA 99503
PHONE: 1097582-2522
PACCI 2822-AV





P.C.C. S	IDEWALK						
SHEET	APPX BEGIN STA	APPX OFFSET (FT)	APPX END STA	APPX OFFSET (FT)	4" THICK, AREA (SY)	6" THICK, AREA (SY)	REMARKS
R1	9+81.9	26.9 RT	10+06.9	22.2 RT	10	0	
R1	10+06.9	22.2 RT	10+65.6	16.5 RT	0	33	PARCEL 1-2 DRIVEWAY
R1	10+65.6	16.5 RT	10+80.7	16.5 RT	8	0	
R1	10+80.7	16.5 RT	11+08.3	16.5 RT	0	14	PARCEL 3 DRIVEWAY
R1	11+08.3	16.5 RT	11+23.5	16.5 RT	8	0	
R1	11+23.5	16.5 RT	11+42.0	16.5 RT	0	10	PARCEL 4 DRIVEWAY
R1	11+59.0	16.5 RT	11+78.8	16.5 RT	0	11	PARCEL 5 DRIVEWAY
R1	11+78.8	16.5 RT	11+99.2	16.5 RT	11	0	
R1	11+99.2	16.5 RT	12+16.7	16.5 RT	0	10	PARCEL 6 DRIVEWAY
R1	12+16.7	16.5 RT	12+43.0	16.5 RT	15	0	
R1	12+43.0	16.5 RT	12+60.5	16.5 RT	0	10	PARCEL 7 DRIVEWAY
R1	12+60.5	16.5 RT	12+75.4	16.5 RT	8	0	
R1	12+75.4	16.5 RT	12+92.4	16.5 RT	0	9	PARCEL 8 DRIVEWAY
R1	12+92.4	16.5 RT	13+17.4	16.5 RT	14	0	
R1	13+17.4	16.5 RT	13+40.6	16.5 RT	0	13	PARCEL 9 DRIVEWAY
R1	13+40.6	16.5 RT	13+64.4	16.5 RT	13	0	
R1	13+64.4	16.5 RT	13+86.0	16.5 RT	0	12	PARCEL 10 DRIVEWAY
R2	13+86.0	16.5 RT	14+25.8	16.5 RT	22	0	
R2	14+25.8	16.5 RT	14+46.8	16.5 RT	0	11	PARCEL 11 DRIVEWAY
R2	14+46.8	16.5 RT	14+92.9	16.5 RT	25	0	
R2	14+93.9	16.5 RT	15+10.6	16.5 RT	0	10	PARCEL 12 DRIVEWAY
R2	15+10.6	16.5 RT	15+23.7	16.5 RT	7	0	
R2	15+23.7	16.5 RT	15+42.8	16.5 RT	0	10	PARCEL 13 DRIVEWAY
R2	15+42.8	16.5 RT	15+63.1	16.5 RT	11	0	
R2	15+63.1	16.5 RT	15+81.6	16.5 RT	0	10	PARCEL 14 DRIVEWAY
R2	15+81.6	16.5 RT	16+02.5	16.5 RT	11	0	
R2	16+02.5	16.5 RT	16+24.2	16.5 RT	0	12	PARCEL 15 DRIVEWAY
R2	16+24.2	16.5 RT	16+43.4	16.5 RT	10	0	
R2	16+43.4	16.5 RT	16+64.0	16.5 RT	0	11	PARCEL 16 DRIVEWAY
R2	16+64.0	16.5 RT	16+82.0	16.5 RT	10	0	
R2	16+82.0	16.5 RT	17+01.6	16.5 RT	0	11	PARCEL 17 DRIVEWAY
R2	17+01.6	16.5 RT	17+20.2	16.5 RT	10	0	
R2	17+20.2	16.5 RT	17+39.9	16.5 RT	0	11	PARCEL 18 DRIVEWAY
R2	17+39.9	16.5 RT	17+61.0	16.5 RT	12	0	
R2	17+61.0	16.5 RT	17+76.4	16.5 RT	0	36	PARCEL 19 DRIVEWAY
R2	17+76.4	16.5 RT	17+99.1	16.5 RT	14	0	

P.C.C. S	SIDEWALK (C	CONTINUED)					
SHEET	APPX BEGIN STA	APPX OFFSET (FT)	APPX END STA	APPX OFFSET (FT)	4" THICK, AREA (SY)	6" THICK, AREA (SY)	REMARKS
R3	17+99.1	16.5 RT	18+16.0	16.5 RT	0	11	PARCEL 20 DRIVEWAY
R3	18+16.0	16.5 RT	18+31.1	16.5 RT	9	0	
R3	18+31.1	16.5 RT	18+51.8	16.5 RT	0	13	PARCEL 21 DRIVEWAY
R3	18+51.8	16.5 RT	18+63.0	16.5 RT	7	0	
R3	18+63.0	16.5 RT	18+81.9	16.5 RT	0	12	PARCEL 22 DRIVEWAY
R3	18+81.9	16.5 RT	18+94.3	16.5 RT	8	0	
R3	18+94.3	16.5 RT	19+13.0	16.5 RT	0	12	PARCEL 23 DRIVEWAY
R3	19+13.0	16.5 RT	19+27.1	17.5 RT	8	0	
R3	19+72.8	17.5 RT	20+05.0	16.5 RT	19	0	
R4	40+30.4	17.1 RT	43+47.3	17.2 RT	171	0	
R4	40+40.1	16.5 LT	40+74.5	16.5 LT	0	19	PARCEL 121 DRIVEWAY
R4	40+74.5	16.5 LT	41+02.9	16.5 LT	16	0	
R4	41+02.9	16.5 LT	41+30.9	16.5 LT	0	16	PARCEL 120 DRIVEWAY
R4	41+30.9	16.5 LT	41+48.2	16.5 LT	10	0	
R4	41+48.2	16.5 LT	41+67.2	16.5 LT	0	11	PARCEL 119 DRIVEWAY
R4	41+67.2	16.5 LT	42+25.8	16.5 LT	34	0	
R4	42+25.8	16.5 LT	42+40.3	16.5 LT	0	9	PARCEL 117 DRIVEWAY
R4	42+40.3	16.5 LT	42+50.7	16.5 LT	7	0	
R4	42+50.7	16.5 LT	42+64.2	16.5 LT	0	8	PARCEL 116 DRIVEWAY
R4	42+64.2	16.5 LT	42+77.6	16.5 LT	8	0	
R4	42+77.6	16.5 LT	42+96.6	16.5 LT	0	11	PARCEL 115 DRIVEWAY
R4	42+96.6	16.5 LT	43+13.0	16.5 LT	9	0	
R4	43+13.0	16.5 LT	43+29.0	16.5 LT	0	9	PARCEL 114 DRIVEWAY
R4	43+29.0	16.5 LT	43+48.9	18.3 LT	11	0	

30.10

С	COLORED CONCRETE (6" THICK, RED, BROOM FINISH)									
	SHEET	APPX BEGIN STA	APPX OFFSET (FT)	APPX END STA	APPX OFFSET (FT)	AREA (SY)	REMARKS			
	R1	12+35.7	16.5 LT	12+55.7	16.5 LT	50	PARCEL 124 DRIVEWAY - SEE SHEET R9			

30.12

REMOVE	REMOVE AND RESET INTERLOCKING CONCRETE PAVERS										
SHEET	APPX BEGIN STA APPX OFFSET (FT) APPX OFFSET (FT) APPX OFFSET (FT) AREA (SF) REMARKS										
R1	10+06.3	27.4 RT	10+36.9	22.4 RT	301	PARCEL 1 DRIVEWAY - SEE SHEET R9					

TITLE:

1. DATA PROVIDED BY:

1. DATA PROVIDED BY:

1. TITLE:

1.

BY: DATE:

2. DATA TRANSFERRED BY: TITLE: DATE:

COMPANY: DATE:

3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION). THE CONTRACTOR—PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.

DATA TRANSFER CHEFCKED BY:

TITLE:

THE COMPANY:

THE COM DATA TRANSFER CHECKED BY: _____ ______ TITLE: ____ _____ DATE: ____

DATA	BY	BY	
BASE	TS	MJ	
TOPOGRAPHY	TS	MJ	
PROFILE	RB	JK	FIELD BOOKS
STORM SEWER	MV	JH	DESIGN CRW Books 147, 1
WATER/SANITARY SEWER	MV	JK	
GAS	MV	JK	STAKING
TELEPHONE	MV	JK	
ELECTRIC	JH	TK	
DESIGN	RB	JK	ASBUILT
QUANTITIES	RB	JK	CONTRACTOR
PRELIMINARY/FINAL	RB	JK	INSPECTOR

01							
MJ							
MJ							
JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION
JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10			
JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83			
JK	STAKING						
JK							
TK							
JK	ASBUILT						
JK	CONTRACTOR	BASIS OF THIS DATUM GAAB 1972 ADJUST					
JK	INSPECTOR						
JK							
	CONSTRUCTION RECORD	VERTICAL DATUM					REVISIONS







PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

ROADWAY SUMMARY TABLES

SCALE HOR. N/A GRID SW1638, SW1738

SCALE VER. N/A DATE JAN 2020 STATUS 95% SHEET T4

ADJUST CLEANOUT TO FINISH GRADE							
SHEET	STATION	OFFSET (FT)	REMARKS				
R3	18+08	52.9 RT	PARCEL 20 DRIVEWAY				
R3	18+37	56.1 RT	PARCEL 21 DRIVEWAY				

40.07

ASPHALT SPEED HUMP					
SHEET	STATION	REMARKS			
R1	12+26.38	REFLECTION DRIVE			

50.06

REMOVE	AND REP	LACE MANHOLE	CONE SECTION	OR MANHOLE COVER	AND FRAME OR	BARREL AND CONE
SHEET	STATION	OFFSET (FT)	CONE SECTION	COVER AND FRAME	BARREL & CONE	REMARKS
R1	11+23	1.5 RT	X			
R1	12+01	1.8 RT		X		
R2	14+78	19.2 LT		X		
R3	18+48	18.8 LT		X		
R4	42+38	7.2 RT		X		
SB1, SD1	9+53	72.2 LT			X	

REMOVE AND REPLACE MANHOLE CONE SECTION OR MANHOLE COVER AND FRAME NOTES:

- 1. SEE MASS DETAILS 50-05, 50-25 AND 50-26.
- 2. COORDINATE W/ ENGINEER IN FIELD TO VERIFY WHETHER CONE OR RING ADJUSTMENT IS REQUIRED.

60.03 & 60.05

REMOVE AND F	REPLACE V	ALVE BOX TO	OP SECTION	ON OR ADJUST	KEY BOX
SHEET	STATION	OFFSET (FT)	KEY BOX	VALVE BOX TOP SECTION	REMARKS
R1	10+34	34.1 RT	Х		
R1	10+85	28.7 RT	Х		
R1	10+98	11.5 LT		X	
R1	11+64	30.4 RT	Х		
R1	11+77	29.8 LT	Х		
R1	12+56	30.7 LT	X		
R1	13+16	29.5 RT	X		
R1	13+32	29.5 LT	Х		
R1	13+42	30.2 LT	Х		
	11.10	74.0.1.7			
R2	14+19	31.6 LT	X		
R2	14+69	29.7 LT	X		
R2	15+09	30.3 RT	X		
R2	15+36	29.1 LT	X		
R2	15+75	29.1 RT	X		
R2	15+75	30.8 LT	X		
R2	15+95	6.0 RT		X	
R2	16+17	29.4 RT	X		
R2	16+42	29.1 LT	X		
R2	17+19	29.9 LT	X		
R2	17+28	29.0 LT	X		
R3	18+29	30.7 RT	X		
R3	18+65	29.3 RT	Х		
R3	18+91	30.8 RT	Х		
R4	40+30	11.1 LT		Х	
R4	40+32	12.8 LT		X	
R4	40+70	29.2 LT	Х		
R4	40+71	11.4 LT		Х	
R4	41+04	31.3 LT	Х		
R4	41+52	29.8 LT	Х		
R4	42+41	30.8 LT	X		
R4	42+49	31.1 LT	Х		
R4	42+97	31.2 LT	Х		
R4	43+10	30.4 LT	×		

REMOVE AND REPLACE VALVE BOX TOP SECTION OR ADJUST KEY BOX NOTES:

1. SEE MASS DETAIL 60-16.

ECORD DRAWING					
DATA PROVIDED BY:	TITLE:	- BAS			
THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS	ARE A TRUE AND ACCURATE REPRESENTATION	TOP			
OF THE PROJECT AS CONSTRUCTED.		PRO			
CONTRACTOR:		STO			
BY: TITLE:	DATE:	WA			
BY: TITLE: DATA TRANSFERRED BY: COMPANY: COMPANY	TITLE:	GA:			
COMPANY:	DATE:	TEL			
PACED ON DEDICATION SEED OF THE ENGINEER	(OR AN INDIVIDUAL LINDER HIS /HER DIRECT	ELE DES			
BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION). THE CONTRACTOR—PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.					
DATA TRANSFER CHECKED BY:	TITI F:	QU.			
COMPANY:	DATE:	PRI			
COMM ALVI.	DATE:	- MU			

DATA	DRAWN BY	CHECKED			
SE	TS	MJ			
POGRAPHY	TS	MJ			_
OFILE	RB	JK	FIELD BOOKS	BM NO. LOCATION ELEV. REV DATE DESCRIPTION BY] 😈
ORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66 See page D-24 of the MOA Benchmark Book 238.10	17
TER/SANITARY SEWER	MV	JK		GAAB 96 See page D-26 of the MOA Benchmark Book 313.83	11
s	MV	JK	STAKING		1
LEPHONE	MV	JK] EN
ECTRIC	JH	TK			1"
SIGN	RB	JK	ASBUILT		1
IANTITIES	RB	JK	CONTRACTOR	BASIS OF THIS DATUM GAAB 1972 ADJUST	1
ELIMINARY/FINAL	RB	JK	INSPECTOR		1
INICIPAL/STATE	RB	JK			1
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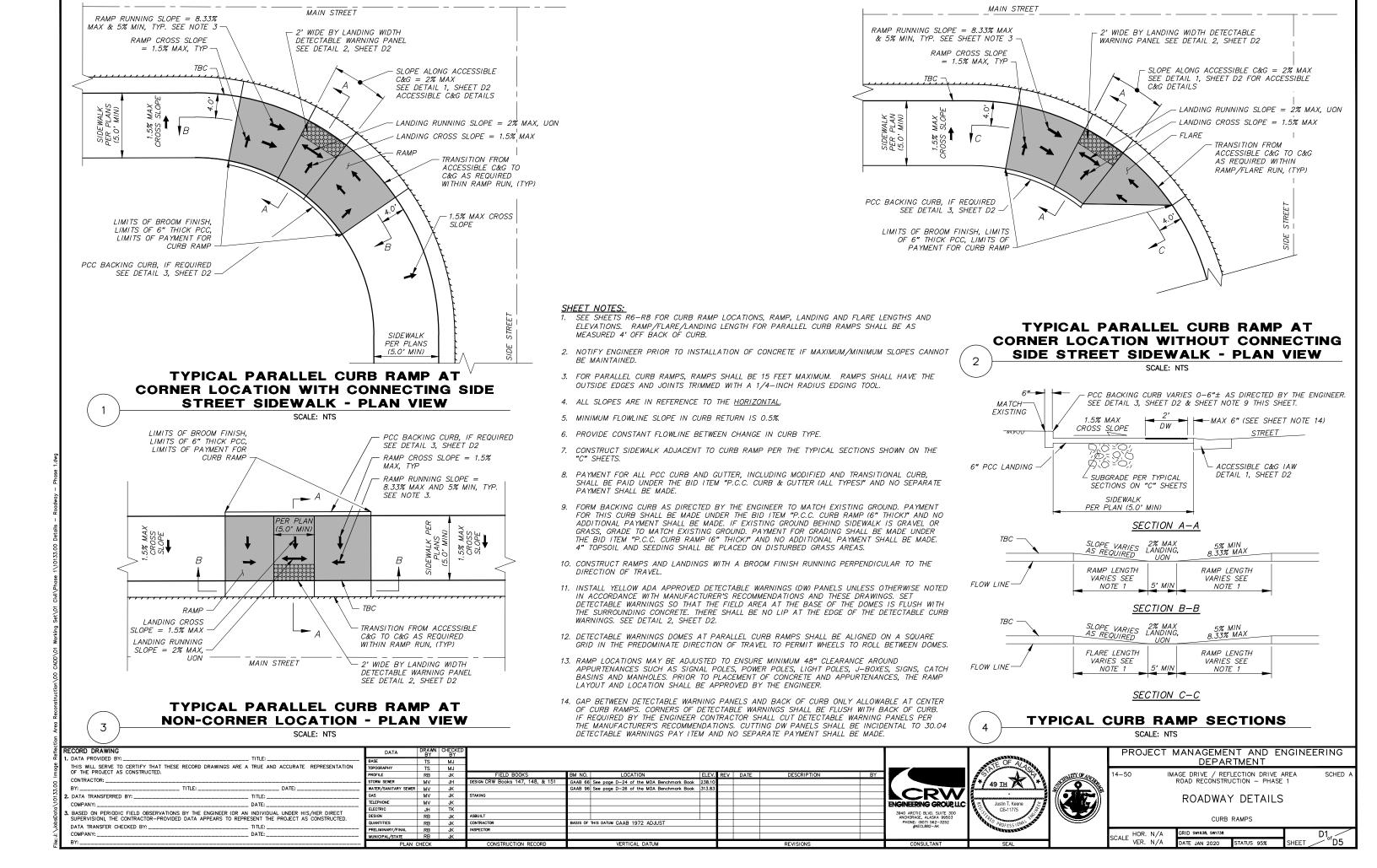
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

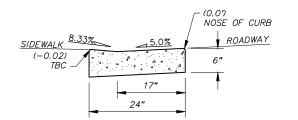
IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

ROADWAY SUMMARY TABLES

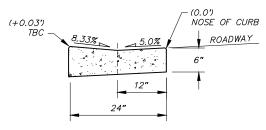
SCALE HOR. N/A GRID SWI638, SWI738

SCALE VER. N/A DATE JAN 2020 STATUS 95%









PCC CURB AND GUTTER TYPE 2A FOR USE IN CURB RAMPS WITH TYPE 2 C&G OR AS INDICATED ON THE PLANS.

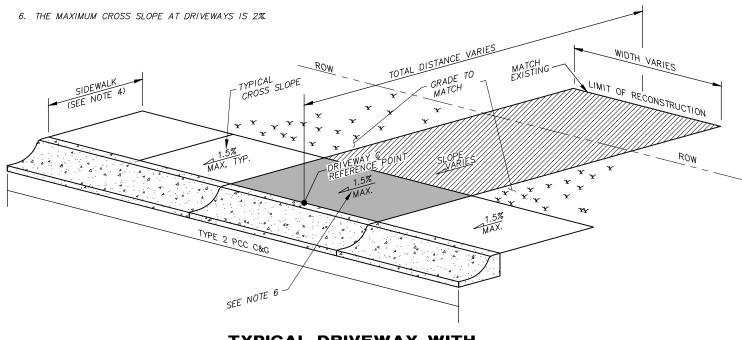
ACCESSIBLE CURB & GUTTER NOTES:

- 1. TRANSITION CURBS TO MAINTAIN CONSTANT FLOWLINE ACROSS CURB RAMP AND AROUND CURB RETURN IAW PLANS.
- 2. PAYMENT FOR ALL PCC CURB AND GUTTER, INCLUDING MODIFIED AND TRANSITIONAL CURB, SHALL BE PAID UNDER THE BID ITEM "PCC CURB & GUTTER (ALL TYPES)" AND NO SEPARATE PAYMENT SHALL BE MADE.

ACCESSIBLE CURB & GUTTER SECTIONS (TYPE 1A & TYPE 2A) SCALE: NTS

SHEET DRIVEWAY NOTES:

- 1. ALL SLOPES ARE IN REFERENCE TO THE HORIZONTAL.
- 2. PAYMENT FOR PCC CURB & GUTTER (ALL TYPES) AND TRANSITION C&G SHALL BE PAID UNDER THE BID ITEM "PCC CURB & GUTTER (ALL TYPES)" AND NO SEPARATE PAYMENT SHALL BE MADE.
- 3. CENTER THE PROPOSED DRIVEWAY ENTRANCES ON DRIVEWAY CENTERLINE REFERENCE POINT AS SHOWN IN THE 20.28 RECONSTRUCT DRIVEWAY SUMMARY TABLES PROVIDED ON THE ROADWAY SUMMARY TABLE "T" SHEETS.
- 4. INCREASE SIDEWALK THICKNESS TO 6" ACROSS ALL DRIVEWAYS AND IN BETWEEN DRIVEWAYS THAT ARE WITHIN 5 FEET OF ADJACENT DRIVEWAYS & INSTALL WELDED WIRE MESH PER THE SPECIFICATIONS.
- 5. SEE 20.28 DRIVEWAY RECONSTRUCTION SUMMARY TABLES ON THE ROADWAY SUMMARY TABLE "T" AND DRIVEWAY RECONSTRUCTION DETAILS, FOR INDIVIDUAL DRIVEWAY SPECIFICS.



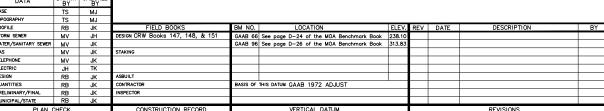
TYPICAL DRIVEWAY WITH **ATTACHED SIDEWALK**

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.

CONTRACTOR: DATE:

. DATA PROVIDED BY:

COMPANY: . BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: __ DATE:



CRW ENGINEERING GROUP LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK







IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

PROJECT MANAGEMENT AND ENGINEERING

ROADWAY DETAILS

DRIVEWAYS

D2_{of} <u>D5</u> HOR, N/A

DETECTABLE WARNING PANEL

SCALE: NTS

1.6" TO 2.4" -

10 0 0 0 +

[⊚ ⊚ ⊚ ⊚[0 0 0

DOME PLAN

PCC BACKING CURB - 1/2" CHAMFER, TYP. LANDING SURFACE

TBC

PLAN VIEW

- DIRECTION OF TRAVEL

BACKING CURB DETAIL NOTES:

1.6" TO 2.4"

1. THE TOP OF BACKING CURB SHALL TRANSITION BACK TO TOP OF SIDEWALK AT TOP RAMP SECTION OF CURB RAMP.

- 0.45" TO 0.91"

- 0.9" TO 1.4"

DOME SECTION

MONOLITHIC

BACKING CURB DETAIL 3 SCALE: NTS

SHEET DRIVEWAY LEGEND:

SEE SHEET NOTE -

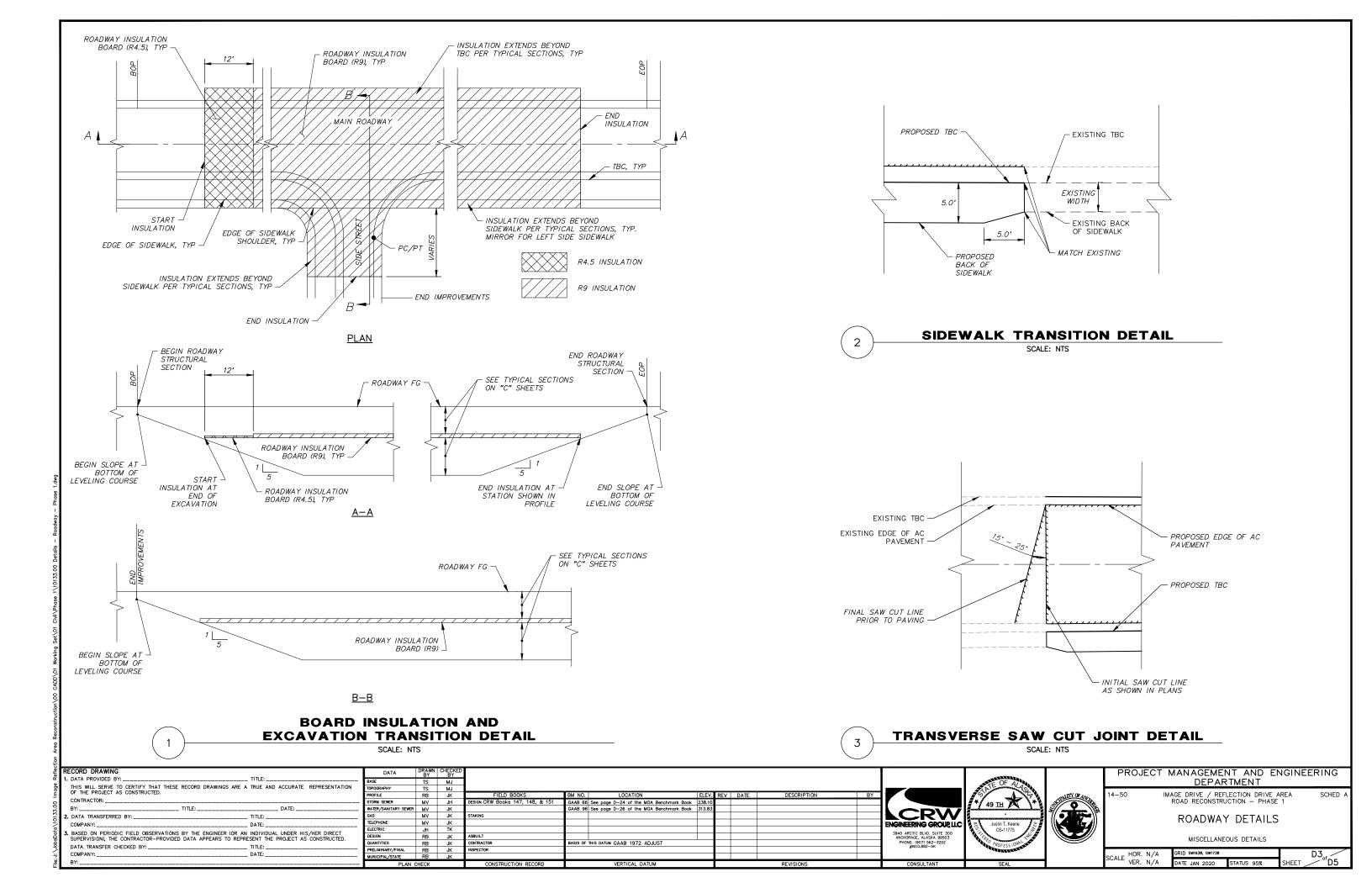
14, SHEET D1

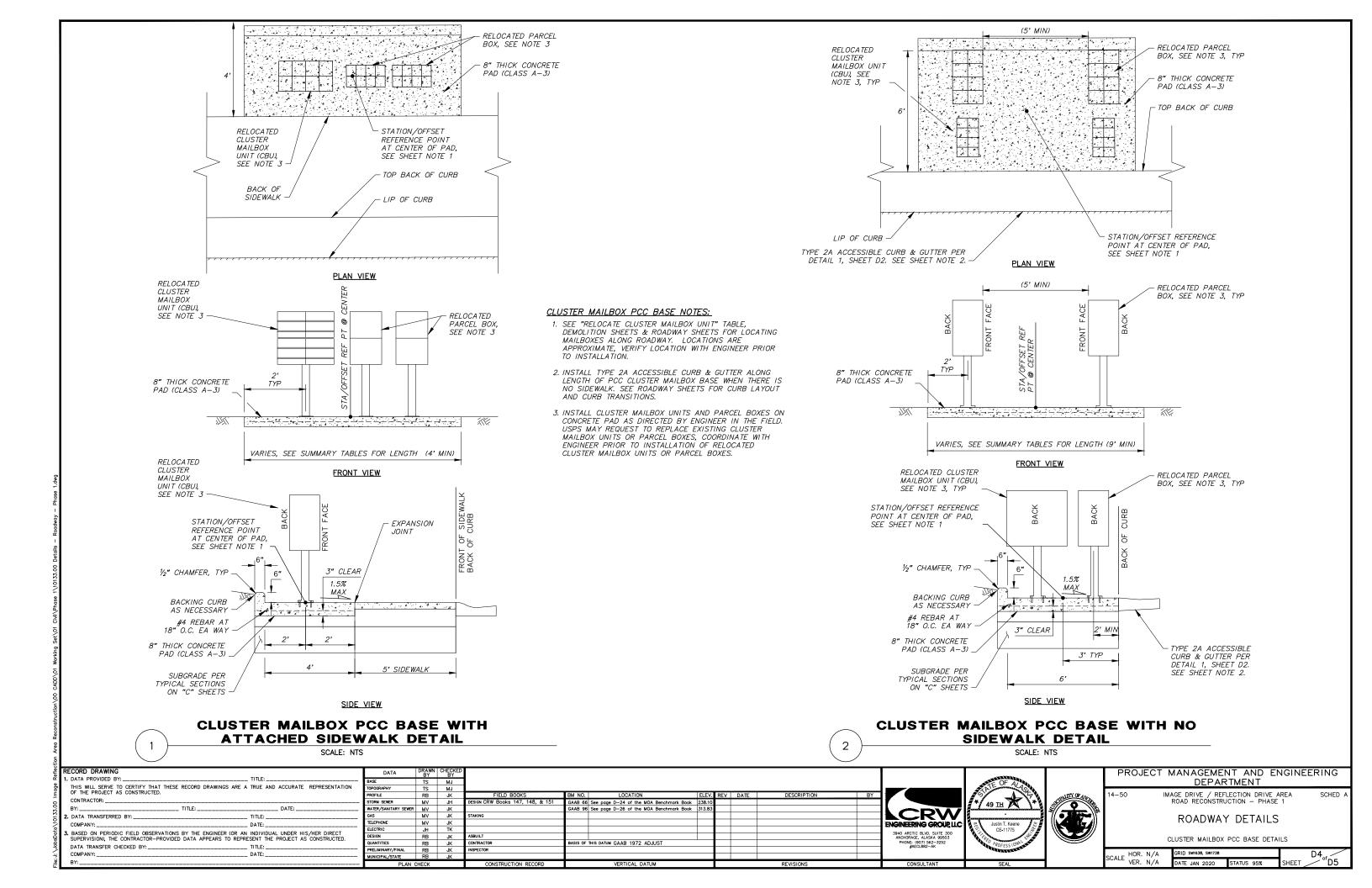
LIMITS OF 2" AC PAVING (CLASS E) FOR DRIVEWAY

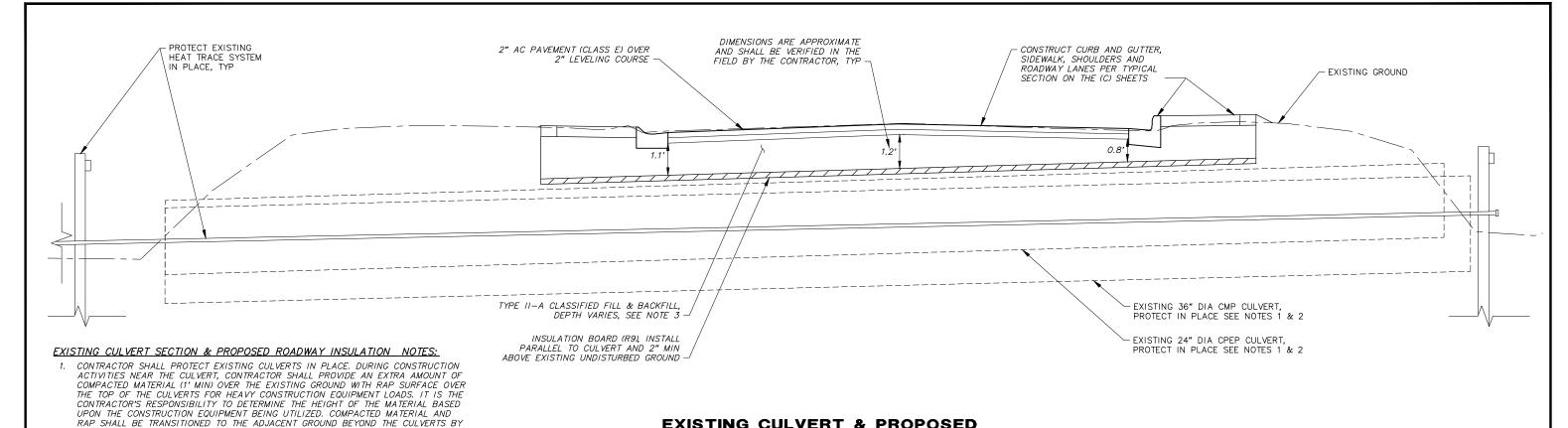
PCC SIDEWALK (6" THICK, STANDARD FINISH), SEE NOTE 4

WIDTH VARIES LIMIT OF RECONSTRUCTION ROW

TYPICAL DRIVEWAY WITH NO SIDEWALK







EXISTING CULVERT & PROPOSED ROADWAY INSULATION SECTION (SECTION CUT PARALLEL TO CULVERTS)

SCALE: NTS

3. TYPE II—A CLASSIFIED FILL AND BACKFILL ABOVE CULVERTS SHALL BE PLACED IN LAYERS NOT EXCEEDING 8" AND DENSELY COMPACTED WITH HAND OPERATED EQUIPMENT. COMPACT TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT, BASED ON MODIFIED PROCTOR TEST VALUES.

2. CONTRACTOR SHALL REPLACE THE CULVERTS AND HEAT TRACE SYSTEM IF ANY DAMAGE IS DONE TO THE CULVERTS DURING CONSTRUCTION OPERATIONS.

PAYMENT SHALL BE MADE.

PROVIDING A SMOOTH AND SAFE GRADE FOR TRAVELING PUBLIC. THIS WORK TO INSTALL AND REMOVE ADDITIONAL COMPACTED MATERIAL WITH RAP SURFACE SHALL BE INCIDENTAL TO THE PAY ITEM 70.12 TRAFFIC MAINTENANCE AND NO SEPARATE

ENGINEERING GROUP LIC

SHO ARCTIC BLVD. SUITE 300
ANCHORACE, ALASKA 99903
PHONE: 6907 362–3252
PHONE: 6907 362–3252

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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

-50 IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

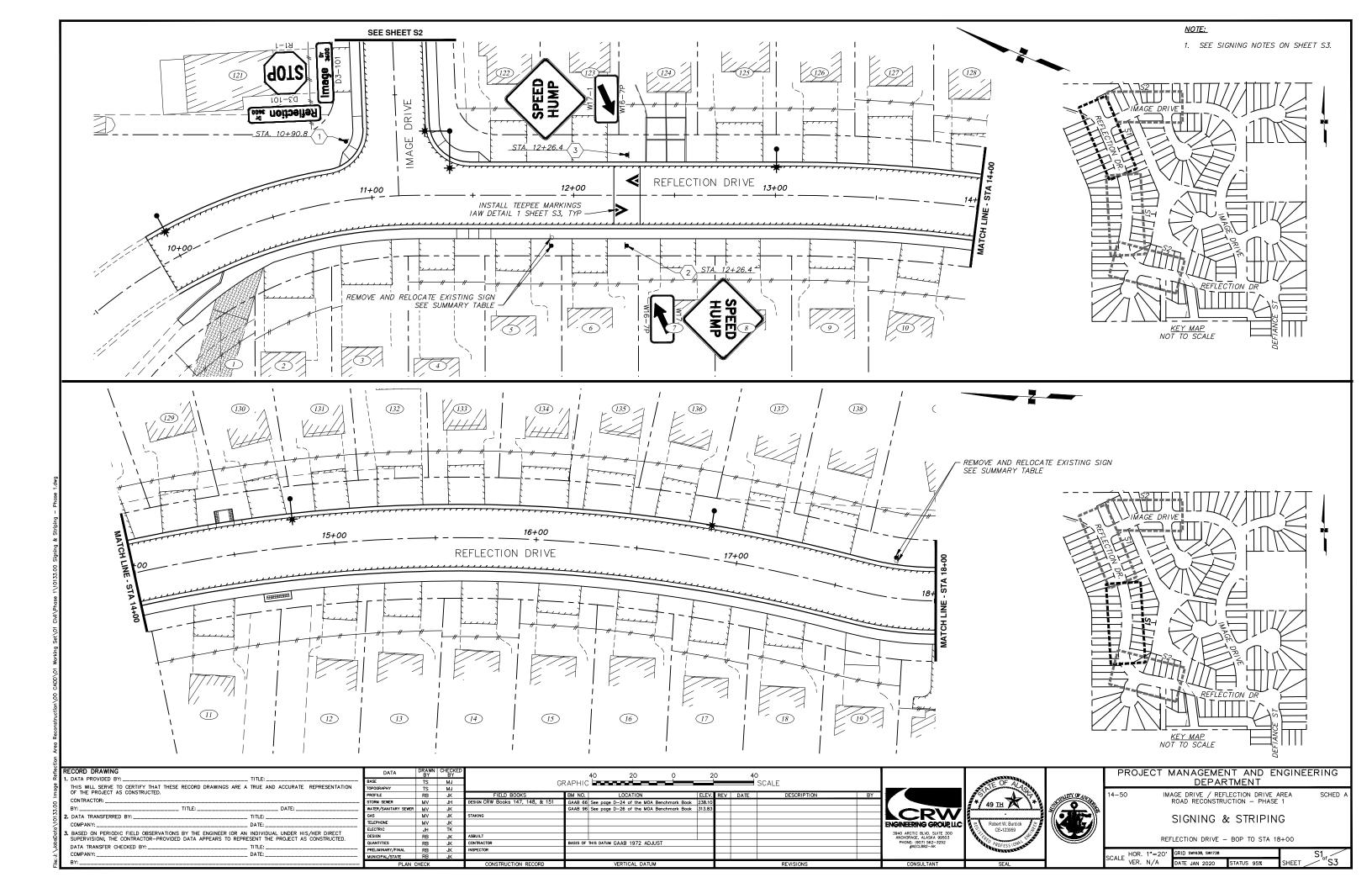
ROADWAY DETAILS

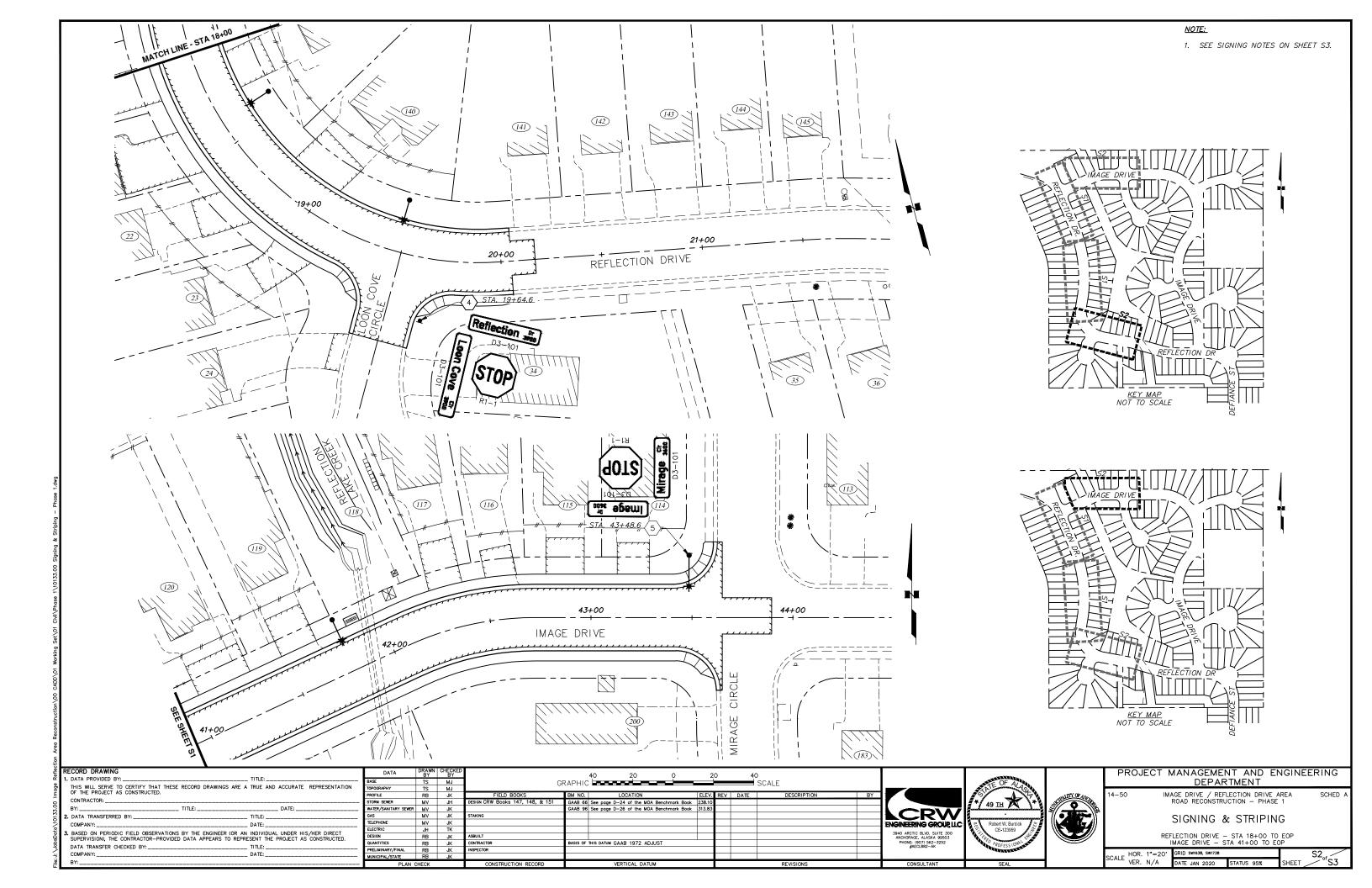
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EXISTING CULVERT & PROPOSED ROADWAY INSLUATION SECTION

HOR. N/A GRID SW1638, SW1738 D5 Of D5

VER. N/A DATE JAN 2020 STATUS 95% SHEET D5

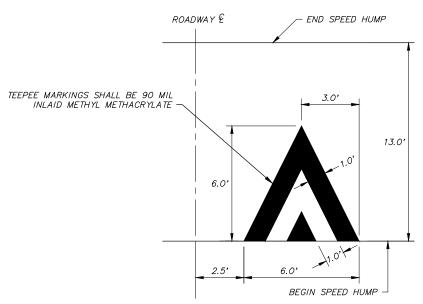




STANDAF	RD SIGN										
SHEET	POST NO.	STATION	OFFSET	TYPE	LEGEND	WIDTH (INCHES)	HEIGHT (INCHES)	AREA (SF)	SIGN FACES	SIGN POST	REMARKS
				D3-101	REFLECTION DR 3600	36	8	2.00	NE/SW		ONE DOUBLE SIDED PANEL
	1	10+90.8	29.0 LT	D3-101	IMAGE DR 3600	30	8	1.67	NW/SE	2.5" PST	ONE DOUBLE SIDED PANEL
				R1-1	STOP	30	30	6.25	NE		
S1	2	12+26.4	25.0 RT	W17-1	SPEED HUMP	30	30	6.25	NW	2.5" PST	
	2	12+20.4	25.0 KT	W16-7P	ARROW (LEFT)	24	12	2.00	NW	2.5 PST	
	3	12+26.4	20.0 LT	W17-1	SPEED HUMP	30	30	6.25	SE	2.5" PST	
	3	12+20.4	20.0 LT	W16-7P	ARROW (LEFT)	24	12	2.00	SE	2.5 F31	
				D3-101	REFLECTION DR 3900	36	8	2.00	NE/SW		ONE DOUBLE SIDED PANEL
	4	19+64.6	31.0 RT	D3-101	LOON COVE CIR 3900	42	8	2.33	NW/SE	2.5" PST	ONE DOUBLE SIDED PANEL
S2				R1-1	STOP	30	30	6.25	SW		
32				D3-101	IMAGE DR 3600	30	8	1.67	N/S		ONE DOUBLE SIDED PANEL
	5	43+48.6	30.8 LT	D3-101	MIRAGE CIR 3600	30	8	1.67	E/W	MOUNT ON LIGHT POLE	ONE DOUBLE SIDED PANEL
				R1-1	STOP	30	30	6.25	N		

SIGNING NOTES:

- 1. THE STATIONS INDICATED IN THE SIGN SUMMARY ARE APPROXIMATE. INSTALL SIGNS AND SIGN FOUNDATIONS PER MASS STANDARD DETAILS. BEFORE INSTALLING ANY SIGN, STAKE THE LOCATION OF ALL SIGNS FOR THE ENGINEER'S REVIEW AND APPROVAL.
- 2. PROVIDE PERFORATED STEEL TUBE (PST) SIGN POSTS OF THE SIZE INDICATED IN THE SIGN
- 3. INSTALL THE POSTS FOR STOP SIGNS AT LOCATIONS THAT CONFORM TO MASS STANDARD DETAIL 70-18.
- 4. ALL STOP SIGNS AND STREET NAME SIGNS SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- 5. INSTALL SIGN ON LIGHT POLES PER SEE MASS STANDARD DETAIL 70-30.
- 6. THE LETTERING FOR STREET NAME SIGNS (D3 SERIES) SHALL BE FEDERAL HIGHWAY ADMINISTRATION "FHWA 2000 SERIES C" LETTERING, A COMBINATION OF LOWER-CASE LETTERS WITH INITIAL UPPER-CASE LETTERS.



TEEPEE MARKINGS FOR SPEED HUMPS

ECORD DRAWING		
DATA PROVIDED BY:	_ TITLE:	BASE
		TOPO
OF THE PROJECT AS CONSTRUCTED.		PROF
CONTRACTOR:		STOR
BY: TITLE:	DATE:	WATE
DATA TRANSFERRED BY:	TITLE:	GAS
COMPANY:	DATE:	TELEF
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SUPERVISION). THE CONTRACTOR—PROVIDED DATA APPEARS TO REPE	ESENT THE PROJECT AS CONSTRUCTED.	DESIG
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COMPANY:	DATE:	MUNI
	THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE AS OF THE PROJECT AS CONSTRUCTED. BY: DATA TRANSFERRED BY: COMPANY: BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN SUPERVISION), THE CONTRACTOR—PROVIDED DATA APPEARS TO REPROJECT ATTAINSFER CHECKED BY: COMPANY: COMPANY: COMPANY:	DATA PROVIDED BY: TITLE: THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: DATE: DATE: DATA TRANSFERRED BY: TITLE: DATE: BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: TITLE: DATE: DAT

DATA	DRAWN BY	CHECKED									
BASE	TS	MJ									1
TOPOGRAPHY	TS	MJ									_
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					11
GAS	MV	JK	STAKING								
TELEPHONE	MV	JK									ENG
ELECTRIC	JH	TK									
DESIGN	RB	JK	ASBUILT								39
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						1
PRELIMINARY/FINAL	RB	JK	INSPECTOR								1
MUNICIPAL/STATE	RB	JK									
PLAN (HECK		CONSTRUCTION RECORD		VERTICAL DATUM				REVISIONS		



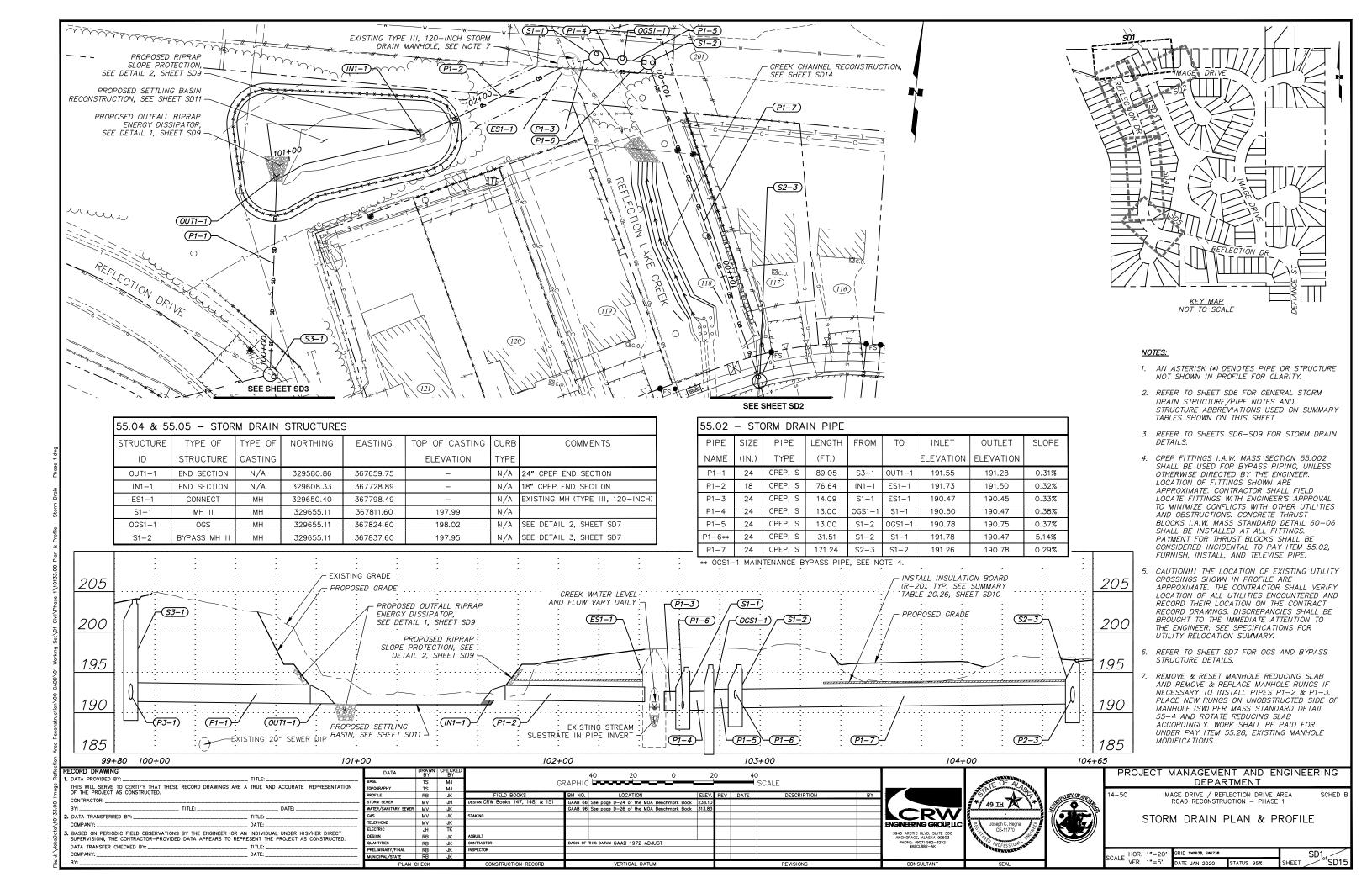


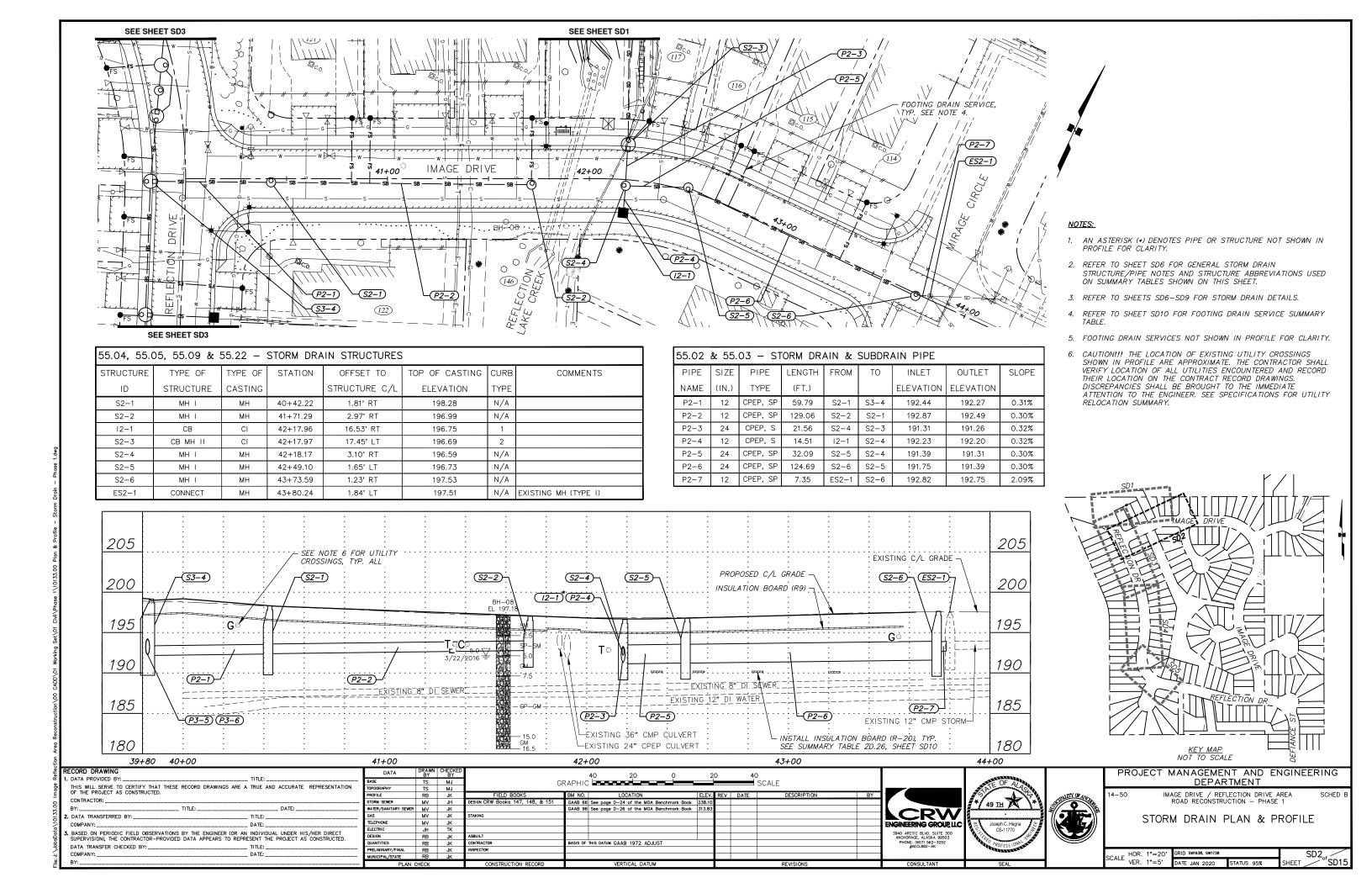
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

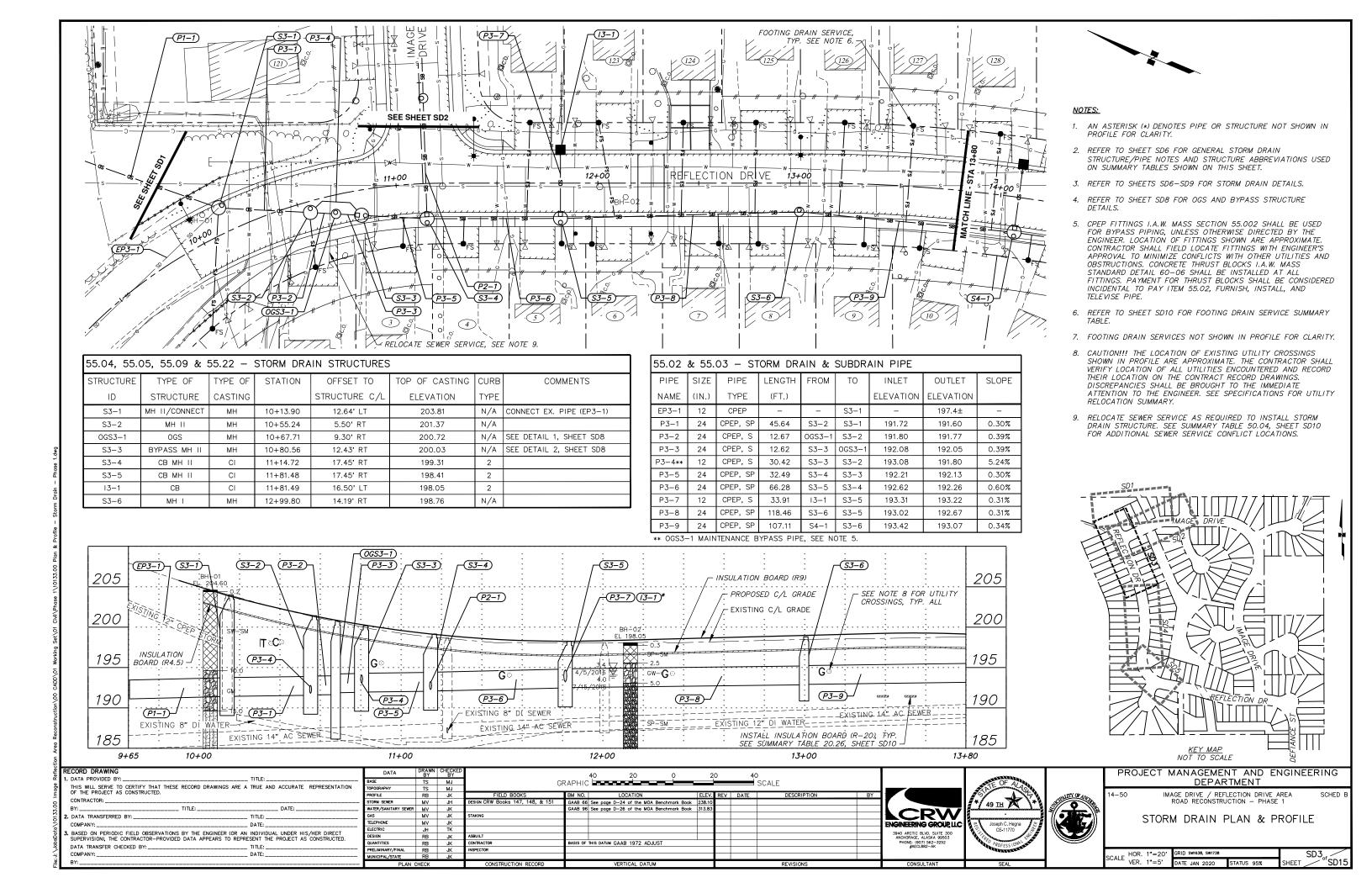
IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

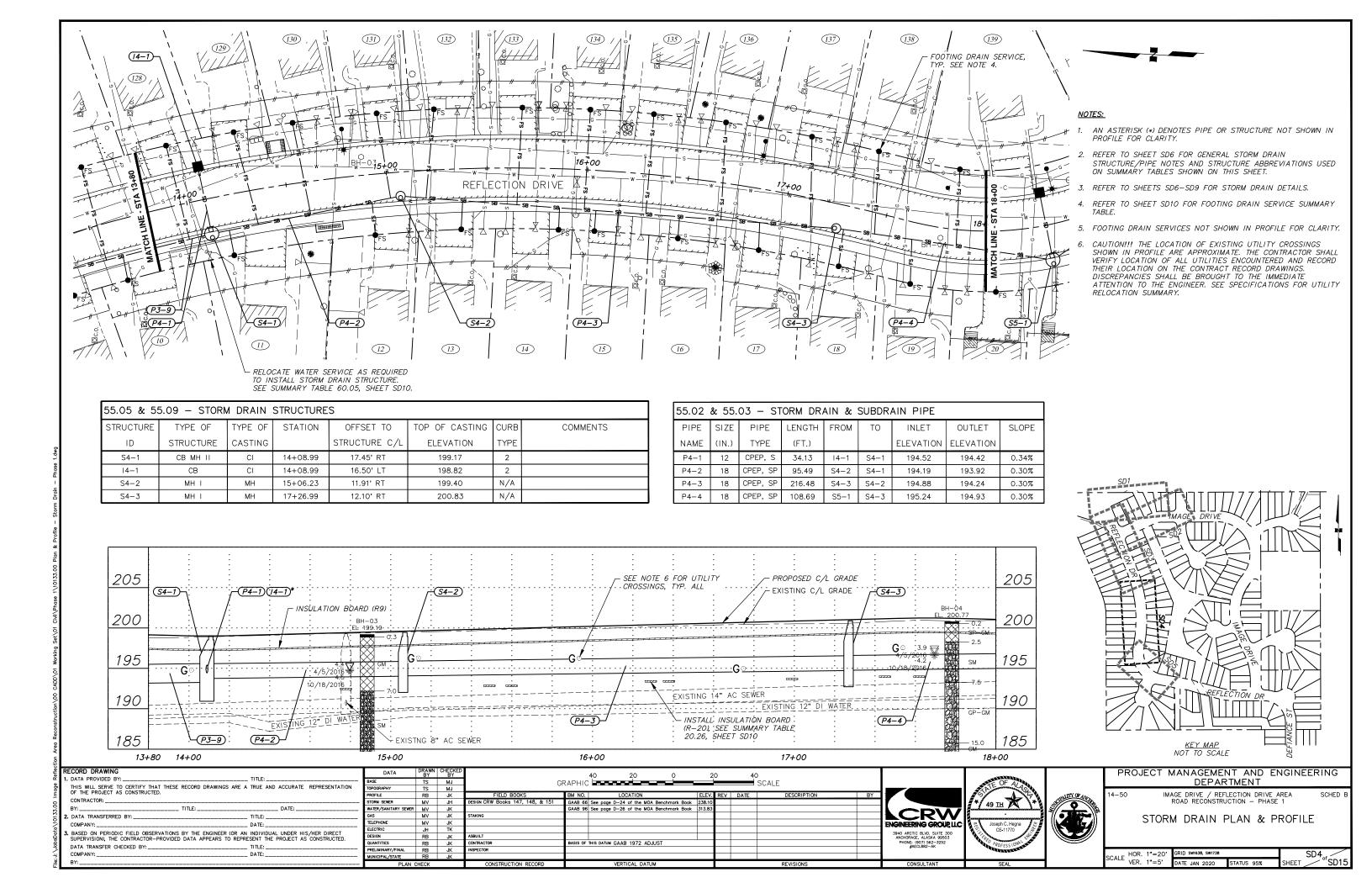
SIGNING & STRIPING

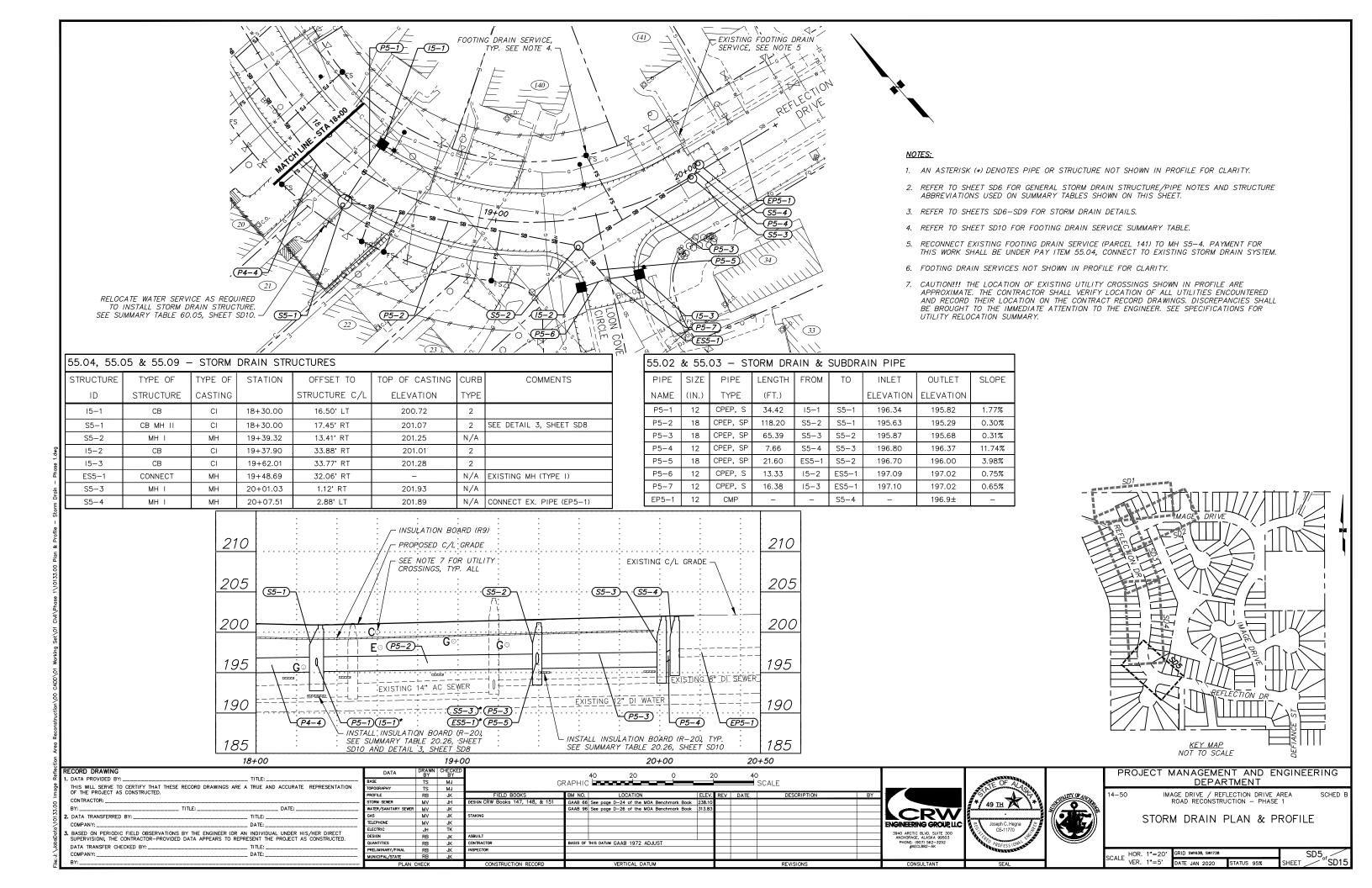
GRID SW1638, SW1738 SCALE HOR. N/A DATE JAN 2020 STATUS 95%





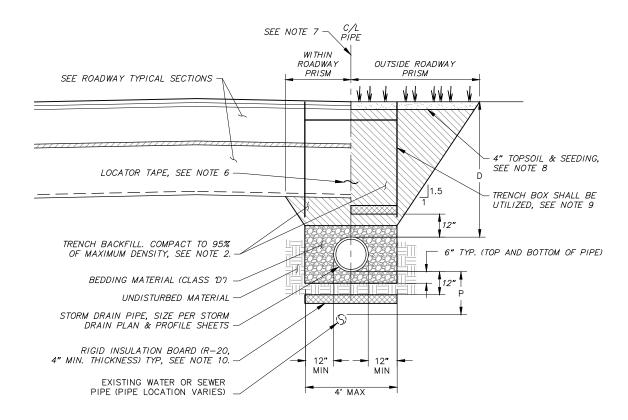






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COMPANY:



STORM DRAIN & SUBDRAIN TRENCH SECTION NOTES:

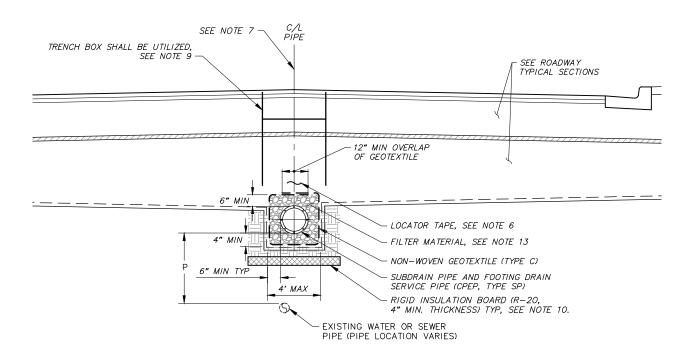
1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH ALL LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED TRENCH WALL SLOPES AND DIMENSIONS ARE FOR PAY QUANTITY DETERMINATIONS ONLY.

TYPICAL STORM DRAIN TRENCH SECTION

- 2. TRENCH BACKFILL SHALL BE NATIVE MATERIAL MEETING TYPE III CLASSIFICATION (MINIMUM) AS APPROVED BY THE ENGINEER. NATIVE MATERIAL NOT MEETING TYPE III CLASSIFICATION SHALL BE REMOVED AND REPLACED WITH TYPE II CLASSIFIED MATERIAL.
- 3. REMOVE AND DISPOSE OF ALL ORGANIC MATERIALS IN ACCORDANCE WITH MASS SECTION 20.13.
- 4. IN PREPARATION FOR AND IMMEDIATELY PRIOR TO PAVING, CONTRACTOR SHALL SAW CUT AND REMOVE AN ADDITIONAL 12 INCHES FROM EXISTING PAVEMENT EDGE. THE ENGINEER MAY REQUIRE MORE THAN 12 INCHES ADDITIONAL CUT IF THE EXISTING PAVEMENT HAS BEEN LIFTED IN THE REMOVAL PROCESS, IF THE JOINT DOES NOT OCCUR ON UNDISTURBED MATERIAL, OR IF THE JOINT IS LOCATED WITHIN THE TRAVEL LANE.
- 5. WHERE WATER AND STORM DRAIN MAINS CROSS, STORM DRAIN MAIN JOINTS SHALL BE AT LEAST 10 FEET FROM WATER MAIN JOINTS.
- 6. INSTALL DETECTABLE LOCATOR TAPE AT LEAST 18 INCHES BUT NO MORE THAN 36 INCHES ABOVE THE CROWN OF THE PIPE.
- 7. LOCATION OF STORM DRAIN VARIES WITHIN ROADWAY. INSTALL STORM DRAIN AS SHOWN ON STORM DRAIN PLAN & PROFILE SHEETS.
- 8. PLACE 4" OF TOPSOIL AND SEEDING (SCHEDULE B) ON ALL DISTURBED AREAS.

DATE:

- 9. TRENCH BOX SHALL BE UTILIZED TO MINIMIZE TRENCH WIDTH AND REDUCE IMPACTS TO ADJACENT PROPERTIES AND RE-VEGETATION. CONTRACTOR SHALL TAKE EXTRA PRECAUTIONS TO AVOID IMPACTS TO TREE PROTECTION ZONES.
- 10. INSTALL INSULATION BOARD (R-20) WHEN:
 - D'IS IS LESS THAN 4' IN AREAS OUTSIDE OF THE INSULATED ROADWAY SECTION OF IMAGE AND REFLECTION DRIVE. INSULATION PLACEMENT SHALL CONFORM TO MASS DETAIL 20-9.
 - 'P' IS LESS THAN 3', AS MEASURED FROM OUTSIDE OF PIPES & WITHIN BEDDING LIMITS, OR AS DIRECTED BY ENGINEER IN THE FIELD.
- 11. WATER LINES CROSSING STORM DRAIN LINES REQUIRE A MINIMUM INSULATED VERTICAL SEPARATION OF EIGHTEEN (18) INCHES. IF EIGHTEEN (18) INCHES CAN NOT BE OBTAINED, THE WATER LINE WILL HAVE TO BE RELOCATED.
- 12. FOOTING DRAIN SERVICES SHALL BE CONSTRUCTED I.A.W. TYPICAL SUBDRAIN TRENCH SECTION (DETAIL 2, THIS SHEET).
- 13. TYPE D FILTER MATERIAL SHALL BE USED ON ALL PIPE (CPEP, TYPE SP) DIAMETERS THREE TO TEN INCHES (3" TO 10"). TYPE C FILTER MATERIAL SHALL BE USED ON ALL PIPE (CPEP, TYPE SP) TWELVE INCHES (12") AND LARGER.





TYPICAL SUBDRAIN AND FOOTING **DRAIN SERVICE TRENCH SECTION**

GENERAL STORM DRAIN STRUCTURE & PIPE NOTES:

HORIZONTAL AND VERTICAL CONTROL POINTS FOR STORM DRAIN STRUCTURES (REFERENCE POINTS CALLED OUT IN PLAN & PROFILE SHEETS) ARE:

<u>STRUCTURE</u>	<u>HORZ CONTROL</u>	<u>REFERENCE ELEV.</u>
TYPE I MH	CENTER OF MH	FG/TOP OF LID.
TYPE II MH	CENTER OF MH	FG/TOP OF LID.
TYPE II CBMH	CENTER OF MH	TBC @ MID. PT. OF CURB INLET HOOD
CATCH BASIN	CENTER OF CB	TBC @ MID. PT. OF CURB INLET HOOD
CR W/FIFID INIFT	CENTER OF CR	FC/TOP OF FRAME

- 2. PIPE LENGTHS ARE BASED ON THE HORIZONTAL DISTANCE BETWEEN THE CENTER OF CONNECTING STRUCTURES OR FITTINGS. PIPE SLOPES ARE CALCULATED USING THE ACTUAL LENGTH OF PIPE FROM THE INSIDE FACE OF STRUCTURES.
- 3. UNLESS OTHERWISE NOTED ALL STORM DRAIN MAIN PIPE SHALL BE CPEP, TYPE SP. SEE LINES NEAR BASIN FOR EXCEPTIONS. CATCH BASIN LEADS WILL BE CPEP, TYPE S.
- 4. THE FOLLOWING ABBREVIATIONS USED ON THE STORM DRAIN STRUCTURE TABLES ON THE PLAN & PROFILES SHEETS ARE DESCRIBED BELOW:

RID SW1638, SW1738

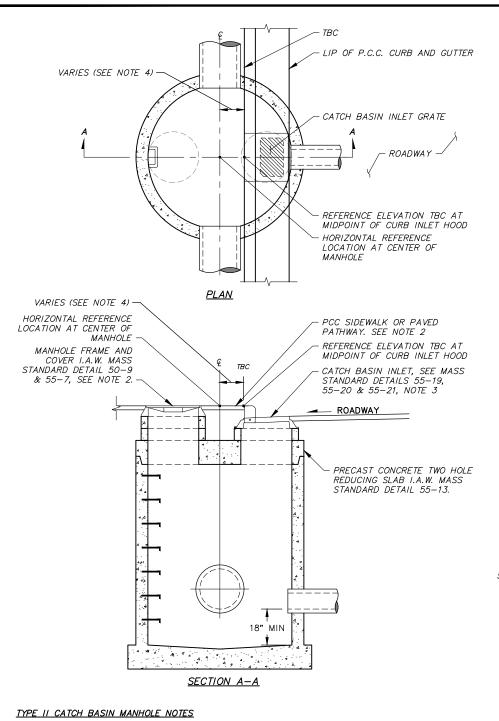
SD6

HOR. N/A

- CB CATCH BASIN
- CB (RED) REDUCED HEIGHT CATCH BASIN
- CB MH II CATCH BASIN MANHOLE, TYPE II
- MH I STORM DRAIN MANHOLE, TYPE
- MH II STORM DRAIN MANHOLE, TYPE II
- OGS OIL AND GRIT SEPARATOR
- CONNECT CONNECT TO EXISTING STORM DRAIN MANHOLE AND/OR PIPE
- C.I. CURB INLET MH MANHOLE FRAME AND LID

RECORD DRAWING	DATA	DRAWN (CHECKED										PROJECT	MANAGEMENT AND ENGINE	ERING
1. DATA PROVIDED BY: TITLE:	BASE	TS	MJ								OF A			DEPARTMENT	
THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION	TOPOGRAPHY	TS	MJ								C.				
OF THE PROJECT AS CONSTRUCTED.	PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION ELEV.	REV	DATE DESCRIPTION	BY			CONTTY OF ALL	14-50 II	MAGE DRIVE / REFLECTION DRIVE AREA	SCHED B
CONTRACTOR:	STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book 238.10	-				*/ AQ TH			ROAD RECONSTRUCTION - PHASE 1	
BY: DATE:	WATER/SANITARY SEWER	MV.	JK		GAAB 96	See page D-26 of the MOA Benchmark Book 313.83	\Box								
2. DATA TRANSFERRED BY:	GAS	MV	JK	STAKING			I			INCRVI		"/ ● 20 → \ \"		STORM DRAIN DETAILS	
COMPANY: DATE:	TELEPHONE	MV	JK							ENGINEERING GROUP LLC	ス Joseph C. Hegna 🥴			STORM DIVAIN DETAILS	
	ELECTRIC	JH	TK				4				CE-11770 (8)				
3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER TOR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION, THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.	DESIGN	RB	JK	ASBUILT						3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503					

IS OF THIS DATUM GAAB 1972 ADJUS



- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS AS CURRENTLY AMENDED AND AS MODIFIED ON THIS DETAIL.
- 2. SET MANHOLE COVER 1/4-INCH BELOW PCC SIDEWALK OR PAVED PATHWAY FINISH GRADE OR PER MASS STANDARD DETAIL 55-10 FOR ALL OTHER LOCATIONS.
- 3. MH CENTER MAY BE ON ROADWAY SIDE OF CURB LINE IN SOME LOCATIONS. ALIGN CATCH BASIN INLET WITH CURB LINE.

TITLE:

DATE:

DATE:

4. OFFSET FOR STANDARD INSTALLATION IS 0.95'.

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.

. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.

RECORD DRAWING

CONTRACTOR:

COMPANY:

. DATA PROVIDED BY:

DATA TRANSFER CHECKED BY: __

TYPE II CATCH BASIN MANHOLE DETAIL SCALE: NTS

4. LADDER RUNGS NOT SHOWN IN SECTION VIEW FOR CLARITY.

ORIENTATION AND STRUCTURE INFORMATION.

SECTION B-B

1. OIL AND GRIT SEPARATOR (STRUCTURE OGS1-1) SHALL BE STORMCEPTOR MODEL STC450i

MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS LLC OR APPROVED EQUAL.

2. ACCESS OPENING THROUGH REDUCING SLAB SHOULD BE POSITIONED OVER THE DROP

3. SEE STORM DRAIN PLAN & PROFILE SHEETS FOR INLET AND OUTLET PIPE INVERTS &

REDUCING SLAB ACCESS TO BE

ORIENTATED OVER OIL INSPECTION

24" CPEP OUTLET

PIPE (P1-4)

MANHOLE FRAME AND COVER I.A.W MASS STANDARD DETAIL

6" MIN

4"ø OIL

INSPECTION PIPE

PIPE (P1-4)

4"Ø OUTLET RISER

PERMANENT POOL **ELEVATION**

OIL & GRIT SEPARATOR NOTES

TEE AND OIL PORT.

24" CPEP OUTLET

PIPE AND DROP TEE. SEE NOTE 2. -

◉

<u>PLAN</u>

25.5"

48" I.D. MANHOLE STRUCTURE

24" CPEP INLET PIPE (P1-5)

LADDER LOCATION AND INSTALLATION I.A.W. MASS

DETAIL 55-4, SEE NOTE 4.

CONCRETE GRADE RINGS

CONCRETE REDUCING SLAB

STORMCEPTOR® INSERT,

24" CPEP INLET PIPE (P1-5)

- 12" Ø REMOVABLE DROP TEE

SEDIMENT STORAGE SUMP

SEE NOTE 1

TEE HANDLE

REMOVABLE DROP

OIL AND GRIT SEPARATOR (OGS1-1) DETAIL SCALE: NTS

- LADDER LOCATION AND INSTALLATION PER MASS DETAIL 55-4 24" CPEP INLET PIPE (P1-7) 12" CPEP BYPASS PIPE (P1-6) SEE NOTE 4 & 5 <u>PLAN</u> GATE STEM AND HANDWHEEL SHALL EXTEND INTO MANHOLE OPENING TO ALLOW MANHOLE FRAME AND COVER FOR OPERATION FROM ABOVE, I.A.W. MASS STANDARD SEE NOTE 1 & 2. DETAIL 50-9 & 55-7, TYP. CONCRETE GRADE RING I.A.W. MASS STANDARD DETAIL 55-5, TYP. GATE TO BE AFFIXED TO MOUNTING SURFACE PER MANUFACTURER'S PRECAST CONCRETE TWO RECOMMENDATIONS HOLE REDUCING SLAB, SEE MASS STANDARD DETAIL 55-13. 24" CPEP OUTLET PIPE (P1-5) STORM DRAIN MANHOLE TYPE II, SEE MASS STANDARD DETAIL 55-5. CONCRETE MOUNTING 24" CPEP INLET PIPE (P1-7) SURFACE CAST INTO MANHOLE, SEE NOTE 1. SECTION C-C BYPASS MANHOLE NOTES

- 1. CAST CONCRETE MOUNTING SURFACE INTO MANHOLE SUCH THAT BYPASS GATE HANDWHEEL IS CENTERED IN ACCESS OPENING.
- 2. BYPASS GATE STEM SHALL BE NON-RISING TO POSITION HANDWHEEL AT CONVENIENT STATIC OPERATING ELEVATION FROM MANHOLE OPENING ABOVE.
- 3. BYPASS MANHOLE (STRUCTURE S1-2) SHALL BE PAID FOR UNDER PAY ITEM 55.05 CONSTRUCT (TYPE II) BYPASS MANHOLE.
- 4. BYPASS PIPE (P1-6) NOT SHOWN IN SECTION A-A FOR CLARITY.
- 5. ADJUST LOCATION OF PIPE PENETRATION INTO MANHOLE FOR BYPASS PIPE (P1-6) AS REQUIRED TO AVOID CONFLICT WITH CONCRETE MOUNTING SURFACE.

BYPASS MANHOLE (\$1-2) DETAIL

CRW ENGINEERING GROUP LLC oseph C. Hegna CE-11770

24"Ø WATERMAN INDUSTRIES

AFFIXED TO FLAT CONCRETE

MOUNTING SURFACE CAST INTO MANHOLE, SEE NOTE 1.

24" CPEP OUTLET PIPE (P1-5) -

CL-10 CANAL GATE OR

APPROVED EQUAL TO BE

DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

SCHED

PROJECT MANAGEMENT AND ENGINEERING

PRECAST CONCRETE TWO HOLE

REDUCING SLAB, SEE MASS

STANDARD DETAIL 55-13

STORM DRAIN DETAILS

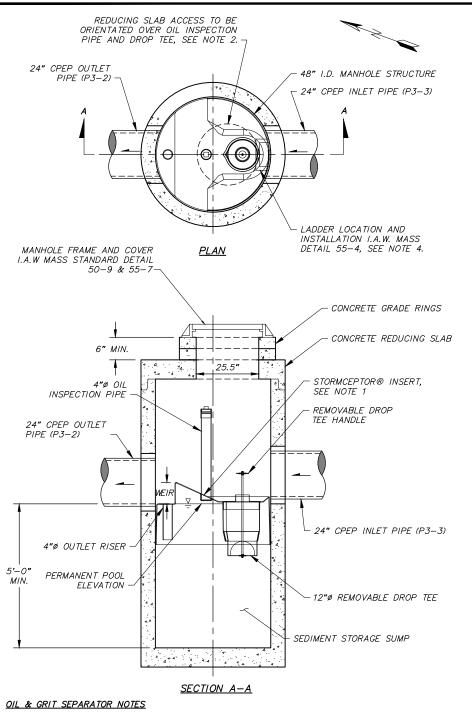
RID SW1638, SW1738 SD7 HOR. N/A



AB 66 See page D-24 of the MOA B AB 96 See page D-26 of the MOA Benchmark Book IS OF THIS DATUM GAAB 1972 ADJUS

3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK

3



- 1. OIL AND GRIT SEPARATOR (STRUCTURE OGS3-1) SHALL BE STORMCEPTOR MODEL STC450i MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS LLC OR APPROVED EQUAL.
- 2. ACCESS OPENING THROUGH REDUCING SLAB SHOULD BE POSITIONED OVER THE DROP TEE AND OIL PORT.
- 3. SEE STORM DRAIN PLAN & PROFILE SHEETS FOR INLET AND OUTLET PIPE INVERTS & ORIENTATION AND STRUCTURE INFORMATION.

TITLE:

DATE:

DATE:

4. LADDER RUNGS NOT SHOWN IN SECTION VIEW FOR CLARITY.

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.

. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.

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RECORD DRAWING

CONTRACTOR:

COMPANY:

. DATA PROVIDED BY:

. DATA TRANSFERRED BY: __

DATA TRANSFER CHECKED BY: ___

OIL AND GRIT SEPARATOR (OGS3-1) DETAIL

SCALE: NTS

12" CPEP BYPASS PIPE (P3-4), 24"Ø WATERMAN INDUSTRIES SEE NOTE 4 & 5 CL-10 CANAL GATE OR APPROVED EQUAL TO BE AFFIXED TO FLAT CONCRETE MOUNTING SURFACE CAST INTO MANHOLE, SEE NOTE 1. PRECAST CONCRETE TWO HOLE REDUCING SLAB, SEE MASS STANDARD DETAIL 55-13 24" CPEP OUTLET PIPE (P3-3) 24" CPEP INLET PIPE (P3-5) ADDER LOCATION AND INSTALLATION PER MASS DETAIL 55-4 GATE FRAME, STEM, AND MANHOLE FRAME AND COVER <u>PLAN</u> HANDWHEEL SHALL EXTEND I.A.W. MASS STANDARD INTO MANHOLE OPENING TO DETAIL 50-9 & 55-7, TYP. ALLOW FOR OPERATION FROM ABOVE, SEE NOTE 1 & 2. CONCRETE GRADE RING I.A.W. MASS STANDARD DETAIL 55-5, TYP. PRECAST CONCRETE TWO HOLE REDUCING SLAB GATE TO BE AFFIXED TO MOUNTING SURFACE PER SEE MASS STANDARD DETAIL 55-13. MANUFACTURER'S RECOMMENDATIONS STORM DRAIN MANHOLE TYPE II, SEE MASS STANDARD DETAIL 55-5. 24" CPEP INLET PIPE (P3-5) 24" CPEP OUTLET PIPE (P3-3) _ CONCRETE MOUNTING SURFACE CAST INTO MANHOLE, SEE NOTE 1

BYPASS MANHOLE NOTES

CAST CONCRETE MOUNTING SURFACE INTO MANHOLE SUCH THAT BYPASS GATE HANDWHEEL IS CENTERED IN ACCESS OPENING.

SECTION B-B

- 2. BYPASS GATE STEM SHALL BE NON-RISING TO POSITION HANDWHEEL AT CONVENIENT STATIC OPERATING ELEVATION FROM MANHOLE OPENING ABOVE.
- BYPASS MANHOLE (STRUCTURE S3-3) SHALL BE PAID FOR UNDER PAY ITEM 55.05 CONSTRUCT (TYPE II) BYPASS MANHOLE.
- 4. BYPASS PIPE (P3-4) NOT SHOWN IN SECTION A-A FOR CLARITY.
- 5. ADJUST LOCATION OF PIPE PENETRATION INTO MANHOLE FOR BYPASS PIPE (P3-4) AS REQUIRED TO AVOID CONFLICT WITH CONCRETE MOUNTING SURFACE.

BYPASS MANHOLE (S3-3) DETAIL

SCALE: NTS

MANHOLE PER MASS TYPE II-A COMPACTED TO 95% MAXIMUM DENSITY OR FILTER MATERIAL (TYPE C) UNDER CENTER OF MH. 12" TYP SEE NOTE 1. 12" INSTALL RIGID BOARD INSULATION (R-20) WHEN 'D' IS LESS THAN 3' AND EXISTING WATER OR WITHIN 'W', WHERE 'W' IS THE WIDTH OF MANHOLE SEWER PIPE PER PLANS. GEOTEXTILE (TYPE A)

MANHOLE INSULATION NOTES

CONSTRUCT FOUNDATION MATERIAL FROM TYPE II-A CLASSIFIED FILL WHEN SUBGRADE IS DRY. CONSTRUCT FOUNDATION MATERIAL FROM TYPE C FILTER MATERIAL WHEN SUBGRADE IS SATURATED, BELOW WATER TABLE, OR AS DIRECTED BY ENGINEER. PAYMENT FOR FOUNDATION MATERIAL AND GEOTEXTILE SHALL BE INCIDENTAL TO PAY ITEM 20.26, INSULATION BOARD (R-20).

MANHOLE INSULATION DETAIL 3

SCALE: NTS

AB 66 See page D-24 of the MOA Benchmark E AB 96 See page D-26 of the MOA Benchmark Book

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PROJECT MANAGEMENT AND ENGINEERING **DEPARTMENT** IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1 SCHED

STORM DRAIN DETAILS

PRECAST CONCRETE

RID SW1638, SW1738 SD8 HOR. N/A DATE JAN 2020

IS OF THIS DATUM GAAB 1972 ADJUST

CRW ENGINEERING GROUP LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK

PLACE RIPRAP (CLASS 1) AROUND AND OVER PIPE OUTLET ON BASIN SIDE SLOPE 18" CPEP FLARED END SECTION (IN1-1) 2' (MIN) MATCH FINISH GRADE OF SETTLING BASIN, SEE SHEET SD11 18" CPEP STORM DRAIN PIPE (P1-2)

RIPRAP SLOPE PROTECTION DETAIL

SECTION A-A 11' (MIN) 2' (MIN) 24" CPEP STORM DRAIN PIPE (P1-1) END SECTION GRATING, SEE NOTE 1 24" CPEP FLARED END RIPRAP (CLASS 1) SECTION (OUT1-1) -HORIZONTAL REFERENCE POINT FOR FLARED END SECTION <u>PLAN</u>

SEE ROADWAY TYPICAL ROW / ROW / MANUFACTURED 60d SPIKE FOR PROPERTY SECTION (C) SHEETS -ROW & PROJECT PROPEŔTY TEE OR SADDLE METAL DETECTION LINE LINE GEOTEXTILE (TYPE A) DRIVEWAY 22 ½° BEND OR AS DIRECTED BY THE ENGINEER (LOCATION VARIES) LIMITS OF ROADWAY PCC SIDEWALK **EXCAVATION** (LOCATION VARIES) 1.0% MIN. (TYP) SUBDRAIN PIPE (CPEP, TYPE SP), LOCATION & DEPTH VARIES, SEE SHEETS SD1-SD5 FOR MORE INFORMATION 2"X4" CEDAR MARKER POST AND PIPE CAP, SEE NOTE 3 FOOTING DRAIN SERVICE (6" CPEP, TYPE SP), TYP. - SEE NOTE 3 LOCATION & DEPTH VARIES, SEE DETAIL 2, SHEET SD6 FOR TYPICAL SECTION.

FOOTING DRAIN SERVICE NOTES

3

- 1. FINAL LOCATION OF THE FOOTING DRAIN SERVICE MAY BE ADJUSTED BY THE ENGINEER.
- 2. WHEN FOOTING DRAIN CONNECTS DIRECTLY TO A MANHOLE, OMIT THE 22 1/2° BEND AND CONSTRUCT THE INVERT A MINIMUM OF 1 FT ABOVE THE DOWNSTREAM INVERT.
- 3. CONNECT TO ON-PROPERTY FOOTING DRAIN, WHEN PRESENT, AT PROPERTY LINE, AND OMIT MARKER POST. CONTRACTOR SHALL ADAPT AND PROVIDE BELL-REDUCER OR COUPLING CONNECTION TO EXISTING FOOTING DRAIN OF WHATEVER PIPE SIZE AND TYPE AND RESOLVE CONNECTION DETAILS WITH PROPERTY OWNER AND ENGINEER.
- 4. CONNECTION TO EXISTING FOOTING DRAIN SHALL BE INCIDENTAL TO PAY ITEM 55.18, CONSTRUCT FOOTING DRAIN SERVICE.

FOOTING DRAIN SERVICE DETAIL

SCALE: NTS

RIPRAP APRON NOTES

TITLE:_

_ DATE: _

DATE:

- GRATE OPENINGS SHALL BE NO MORE THAN 4-INCHES AND SHALL BE EITHER HINGED OR REMOVABLE FOR MAINTENANCE ACCESS.
- 2. PAYMENT FOR GEOTEXTILE (TYPE C) SHALL BE INCIDENTAL TO PAY ITEM 20.24 RIPRAP (CLASS I).
- 3. PAYMENT FOR FLARED END SECTION AND GRATE SHALL BE INCIDENTAL TO PAY ITEM 55.02 FURNISH AND INSTALL PIPE.

RECORD DRAWING

CONTRACTOR:

COMPANY:

. DATA PROVIDED BY:

. DATA TRANSFERRED BY: ___

DATA TRANSFER CHECKED BY: __

OUTFALL RIPRAP ENERGY DISSIPATOR DETAIL

SCALE: NTS

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. . BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.

AB 66 See page D-24 of the MOA Benchmark E AB 96 See page D-26 of the MOA Benchmark Book IS OF THIS DATUM GAAB 1972 ADJUS

CRW oseph C. Hegna CE-11770 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK



PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT SCHED

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

STORM DRAIN DETAILS

GRID SW1638, SW1738 SD9 HOR. N/A

ENGINEERING GROUP LLC

INSULATION BOARD NOTES

1. INSULATION BOARD SHALL BE INSTALLED I.A.W. TYPICAL STORM DRAIN AND SUBDRAIN TRENCH SECTIONS (DETAIL 1 & 2, SHEET SD6) AND MASS DETAIL 20-9.

50.0	4 –	RAISE OR	LOWER SEW	ER SERVICE	•		
		START	START	END	END		
SHE	EΤ	STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)	REMARKS
SD	3	10+68	5.2 LT	10+58	31.8 RT	38	POTENTIAL CONFLICT WITH STORM DRAIN
SD	3	11+11	1.1 RT	11+09	30.1 RT	29	POTENTIAL CONFLICT WITH STORM DRAIN
SD	3	11+20	1.4 RT	11+19	30.0 RT	29	POTENTIAL CONFLICT WITH STORM DRAIN

60.05 -	FURNISH	AND INSTALL	. WATER SE	RVICE LINE		
	START	START	END	END		
SHEET	STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)	REMARKS
SD4	14+01	11.3 LT	14+05	25.5 RT	40	POTENTIAL CONFLICT WITH STORM DRAIN
SD5	18+35	3.1 LT	18+29	30.0 RT	34	POTENTIAL CONFLICT WITH STORM DRAIN

WATER SERVICE LINES NOTES

- 1. EXISTING WATER SERVICES IN CONFLICT WITH PROPOSED STORM DRAIN NEED TO BE FIELD VERIFIED FOR PROPER VERTICAL SEPARATION. RAISE OR LOWER WATER SERVICE AS NECESSARY TO MAINTAIN A MINIMUM OF 18-INCHES OF VERTICAL SEPARATION FROM PROPOSED STORM DRAIN.
- 2. NO THREE PART UNIONS WILL BE ALLOWED IN ROW FOR WATER SERVICE REPAIRS OR LOWERING.
- 3. WATER SERVICE LINE SHALL BE INSTALLED PER MASS STANDARD DETAIL 60-13.

		Α Τ	MAIN	AT DDOD	EDTV LINE	ADDDOV		EL EVA TION
NICE T	DARGE:		MAIN		ERTY LINE	APPROX.	00111507 70	ELEVATION
SHEET	PARCEL	STATION	OFFSET (FT)	STATION	OFFSET (FT)	LENGTH (FT)		AT ROW (2
SD2	121	40+82	30.0 LT	40+82	2.2 RT	32.2	SUBDRAIN PIPE	
	120	40+91	30.0 LT	40+91	2.2 RT	32.3	SUBDRAIN PIPE	
	119	41+72	30.0 LT	41+71	3.0 RT	31.1	MANHOLE S2-2	
	117	42+26	30.0 LT	42+18	17.4 LT	12.0	MANHOLE S2-3	
	116	42+65	30.0 LT	42+64	0.0 RT	30.0	SUBDRAIN PIPE	
	115	42+71	30.0 LT	42+71	0.3 RT	30.3	SUBDRAIN PIPE	
	114	43+32	30.6 LT	43+32	0.9 RT	31.4	SUBDRAIN PIPE	
SD3	1	9+81	38.5 RT	10+14	12.6 LT	57.7	MANHOLE S3-1	
	2	10+50	32.2 RT	10+55	5.5 RT	23.5	MANHOLE S3-2	
	3	11+01	30.2 RT	11+03	16.2 RT	14.2	SUBDRAIN PIPE	
	4	11+33	30.0 RT	11+34	17.6 RT	12.4	SUBDRAIN PIPE	
	122	11+66	30.0 LT	11+65	17.5 RT	46.2	SUBDRAIN PIPE	
	5	11+82	29.9 RT	11+81	17.5 RT	8.9	MANHOLE S3-5	
	6	11+97	30.0 RT	11+97	17.1 RT	13.1	SUBDRAIN PIPE	
	123	12+00	30.0 LT	12+08	16.8 RT	47.4	SUBDRAIN PIPE	
	124	12+42	30.0 LT	12+41	16.0 RT	45.9	SUBDRAIN PIPE	
	7	12+60	29.9 RT	12+60	15.6 RT	14.4	SUBDRAIN PIPE	
	125	12+78	30.0 LT	12+78	15.1 RT	45.1	SUBDRAIN PIPE	
	8	12+80	30.0 RT	12+80	15.1 RT	15.0	SUBDRAIN PIPE	
	126	13+22	30.0 LT	13+20	15.8 RT	46.0	SUBDRAIN PIPE	
	9	13+33	30.0 RT	13+33	16.7 RT	13.3	SUBDRAIN PIPE	
	127	13+55	30.0 LT	13+54	17.7 RT	47.7	SUBDRAIN PIPE	
	10	13+62	30.0 RT	13+63	17.9 RT	12.3	SUBDRAIN PIPE	
SD4	128	13+96	30.0 LT	13+97	17.8 RT	47.8	SUBDRAIN PIPE	
	11	14+18	30.0 RT	14+18	17.5 RT	12.7	SUBDRAIN PIPE	
	129	14+29	29.9 LT	14+33	17.2 RT	47.2	SUBDRAIN PIPE	
	130	14+57	30.0 LT	14+60	16.1 RT	46.0	SUBDRAIN PIPE	
	12	14+92	30.0 RT	14+92	13.5 RT	16.6	SUBDRAIN PIPE	
	131	14+98	29.9 LT	15+01	12.4 RT	42.5	SUBDRAIN PIPE	
	132	15+25	30.0 LT	15+19	13.6 RT	44.1	SUBDRAIN PIPE	
	13	15+36	30.0 RT	15+37	15.8 RT	14.2	SUBDRAIN PIPE	
	133	15+67	29.9 LT	15+65	18.2 RT	48.2	SUBDRAIN PIPE	
	14	15+86	30.0 RT	15+87	19.4 RT	10.9	SUBDRAIN PIPE	
	134	16+00	30.0 LT	15+99	19.7 RT	49.6	SUBDRAIN PIPE	
	15	16+05	30.1 RT	16+05	19.9 RT	10.2	SUBDRAIN PIPE	
	135	16+30	30.0 LT	16+31	19.8 RT	49.7	SUBDRAIN PIPE	
	16	16+48	30.0 RT	16+48	19.4 RT	10.8	SUBDRAIN PIPE	
	136	16+65	30.0 LT	16+69	18.2 RT	48.3	SUBDRAIN PIPE	
	17	16+90	30.0 RT	16+89	16.7 RT	13.6	SUBDRAIN PIPE	
	137	17+06	29.9 LT	17+14	13.8 RT	44.4	SUBDRAIN PIPE	
	18	17+33	30.0 RT	17+31	11.8 RT	18.4	SUBDRAIN PIPE	
	138	17+39	30.0 LT	17+46	10.4 RT	41.0	SUBDRAIN PIPE	
	19	17+69	30.0 RT	17+65	8.5 RT	22.1	SUBDRAIN PIPE	
	139	17+84	30.0 LT	17+86	8.0 RT	37.9	SUBDRAIN PIPE	
SD5	20	18+04	30.0 RT	18+07	10.5 RT	19.8	SUBDRAIN PIPE	
JD J	21	18+45	30.0 RT	18+42	10.3 RT	18.1	SUBDRAIN PIPE	
	22	18+55	30.0 RT	18+54	8.9 RT	21.2	SUBDRAIN PIPE	
			+		1			
	23	19+01	30.0 RT	19+03	5.1 RT 1.9 RT	25.3 32.9	SUBDRAIN PIPE	

- 1. FOOTING DRAIN SERVICES SHALL BE INSTALLED PER DETAIL 3, SHEET SD9 AND THE SPECIAL PROVISIONS.
- 2. TO BE COMPLETED BY CONTRACTOR AS PART OF AS-BUILT DRAWINGS.
- 3. FOOTING DRAIN SERVICES SHALL BE INSTALLED A MINIMUM OF 11 FEET FROM ANY WATER SERVICE KEY BOX.
- 4. FOOTING DRAIN SERVICES SHALL BE CONSTRUCTED I.A.W. TYPICAL SUBDRAIN TRENCH SECTION (DETAIL 2, SHEET SD6).

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WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					н
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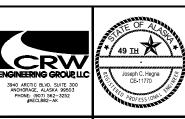


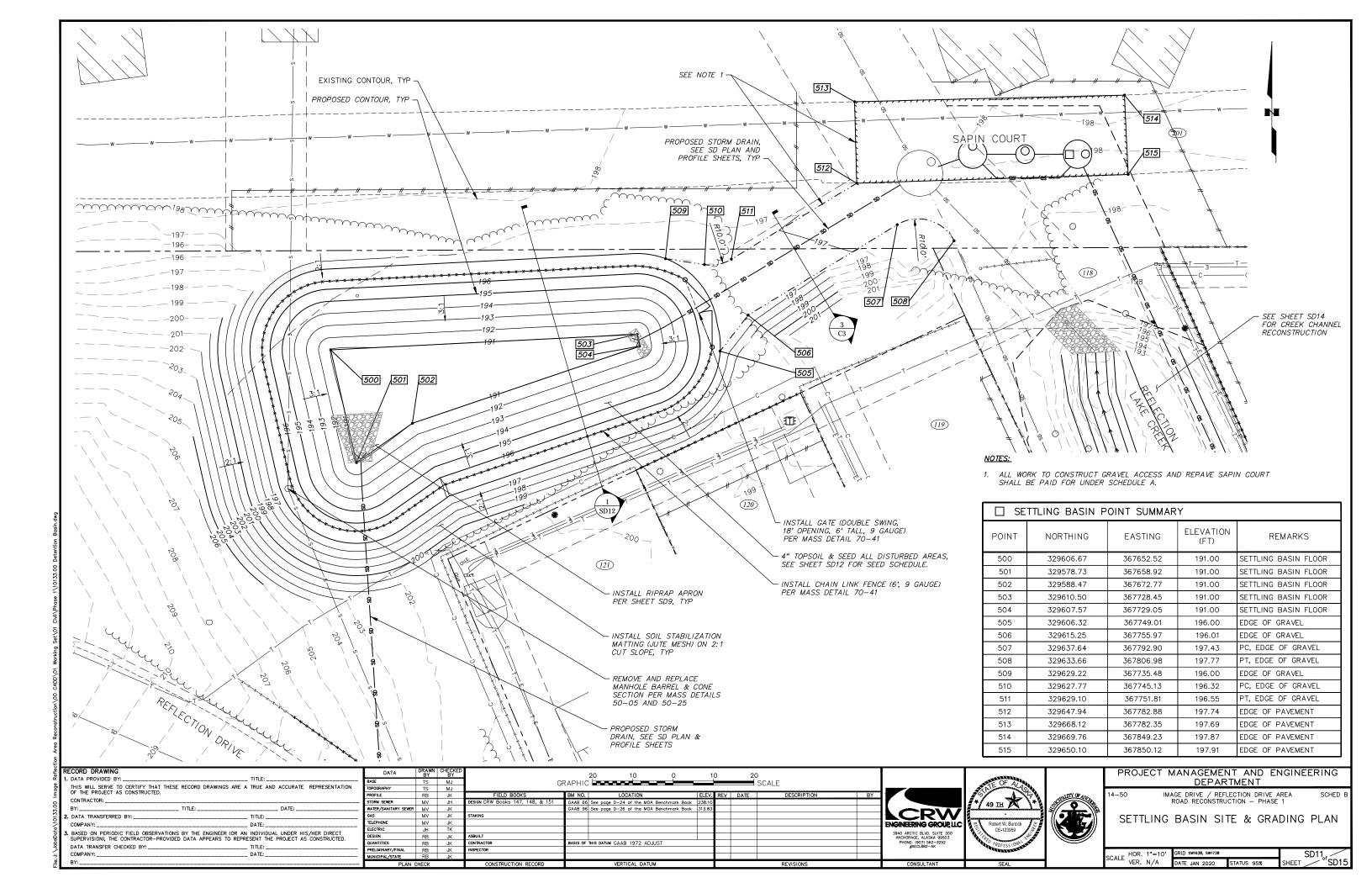




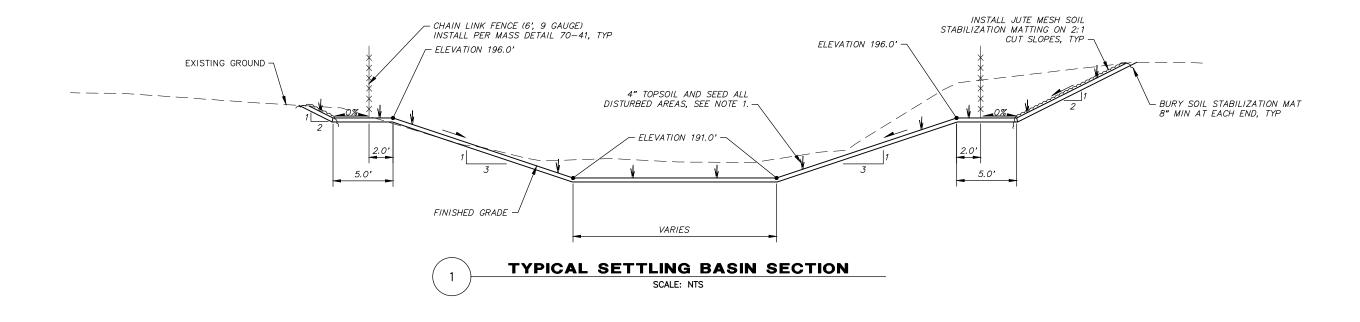
IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

STORM DRAIN SUMMARY TABLES

2415	HOR.	N/A	GRID SW1638, SW1738			9	D10.	. –
CALE	VER.	N/A	DATE JAN 2020	STATUS	95%	SHEET	°	SD1



1. PLACE 4" OF TOPSOIL AND SEEDING (SCHEDULE C — WETLANDS MIX) ON ALL DISTURBED AREAS BELOW ELEVATION 196.0". ALL OTHER DISTURBED AREAS SHALL RECEIVE 4" TOPSOIL AND SEEDING (SCHEDULE B).



70.18			
CHAIN L	INK FENCE (6', 9 GAUGE)		
	PROPOSED	LENGTH	REMARKS
SHEET	LOCATION	(FT)	
SD11	SEE SECTION 1, SHEET SD12	273	SETTLING BASIN FENCE

CHAIN LINK FENCE NOTES:

- 1. SEE MASS DETAIL 70-41 FOR CHAIN LINK FENCE DETAILS.
- 2. STAKE FENCE LAYOUT IN FIELD FOR ENGINEER TO REVIEW AND APPROVE PRIOR TO INSTALLATION. THIS WORK SHALL BE INCIDENTAL TO SECTION 70.18 PAY ITEM.

70	10	
70.	. 10	

GATE (DOUBLE SWING, 18' OPENING, 6' TALL, 9 GAUGE)										
	PROPOSED	LOCATION								
SHEET	NORTHING	EASTING	WIDTH (FT)	REMARKS						
SD11	329615.68	367743.68	18	MID-POINT OF GATE						

DOUBLE SWING GATE NOTES:

- 1. SEE MASS DETAIL 70-41 FOR DOUBLE SWING GATE DETAILS.
- 2. STAKE DOUBLE SWING GATE LAYOUT IN FIELD FOR ENGINEER TO REVIEW AND APPROVE PRIOR TO INSTALLATION. THIS WORK SHALL BE INCIDENTAL TO SECTION 70.18 PAY ITEM.

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PROJECT MANAGEMENT AND ENGINEERING

DEPARTMENT

14-50

IMAGE DRIVE / REFLECTION DRIVE AREA SCHED

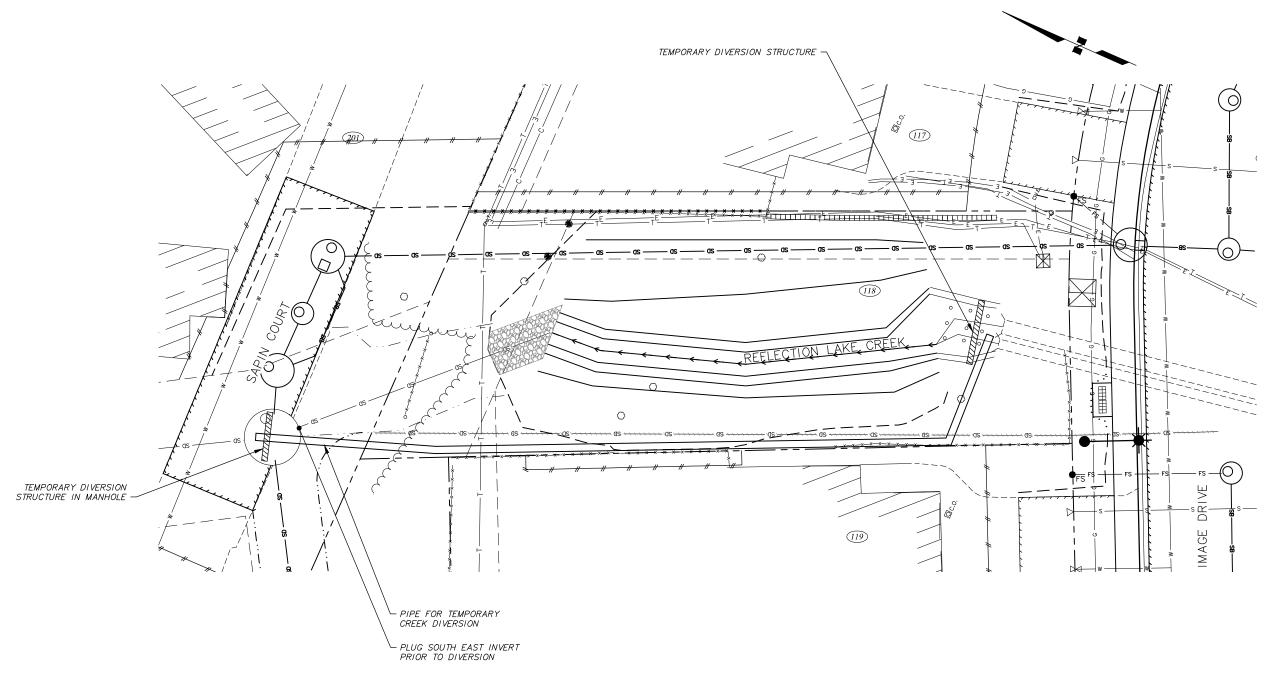
ROAD RECONSTRUCTION - PHASE 1

SETTLING BASIN TYPICAL SECTION & SUMMARY TABLES

SCALE HOR. N/A GRID SWI636, SWI736 SD12
VER. N/A DATE JAN 2020 STATUS 95% SHEET SD15

NOTES:

- 1. DIVERSION STRUCTURE LOCATIONS ARE APPROXIMATE. INSTALL ADDITIONAL DIVERSION STRUCTURES AS REQUIRED TO MAINTAIN DIVERTED FLOWS FROM ENTERING THE WORK AREA. THE HEIGHT OF DIVERSION STRUCTURES SHALL BE DETERMINED/ADJUSTED AS NEEDED TO MAINTAIN DIVERTED FLOWS.
- 2. CONTRACTOR SHALL REPAIR ANY DAMAGE RESULTING FROM THE DIVERSION.
- 3. REFER TO SPECIFICATIONS FOR ADDITIONAL CREEK DIVERSION REQUIREMENTS.
- 4. STREAM DIVERSION ACTIVITIES SHALL ADHERE TO REQUIREMENTS IN ALL APPLICABLE PERMITS.



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	THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A OF THE PROJECT AS CONSTRUCTED.	TRUE AND ACCURATE REPRESENTATION	TC PF
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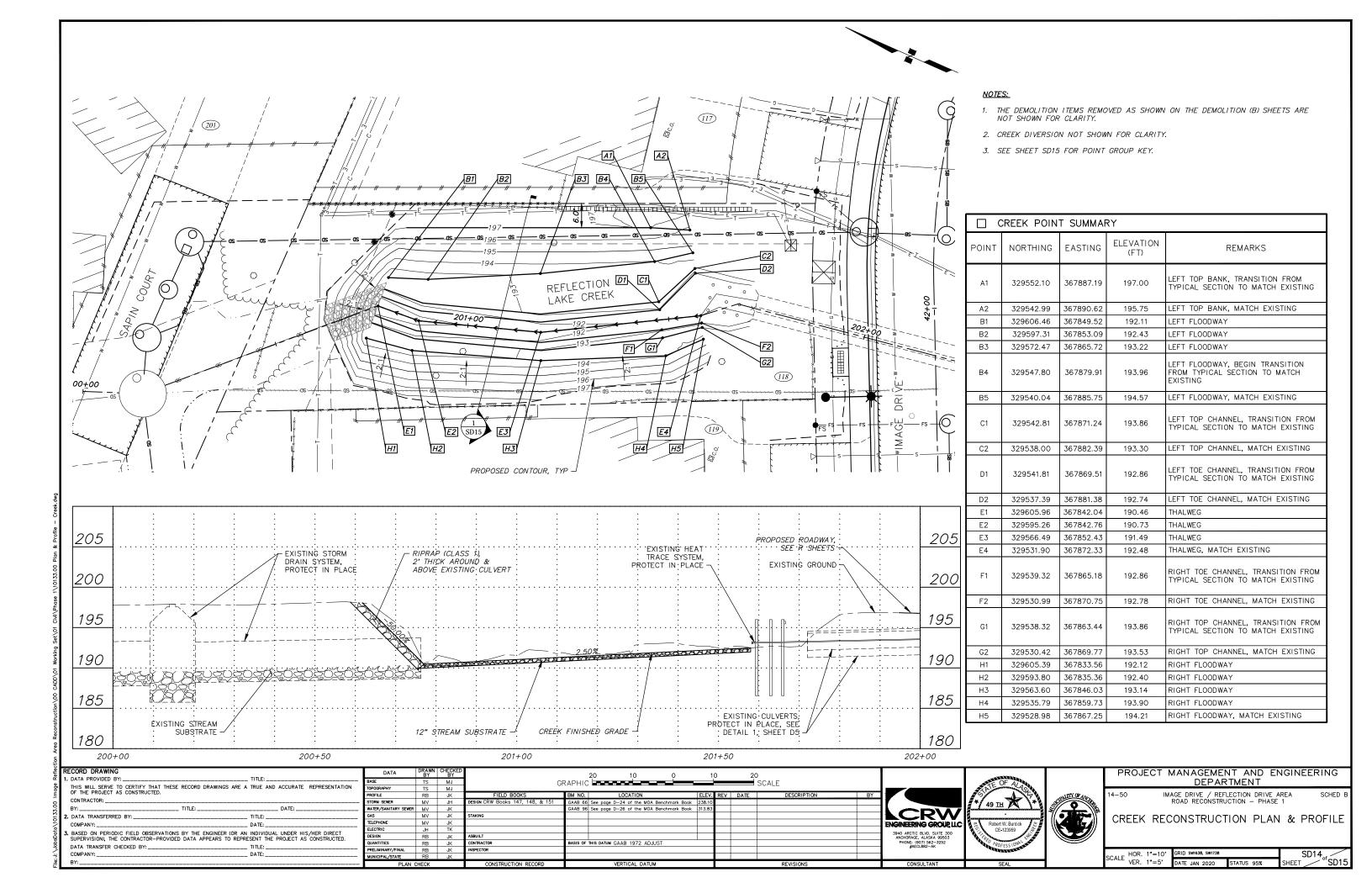
PROJECT MANAGEMENT AND ENGINEERING
DEPARTMENT

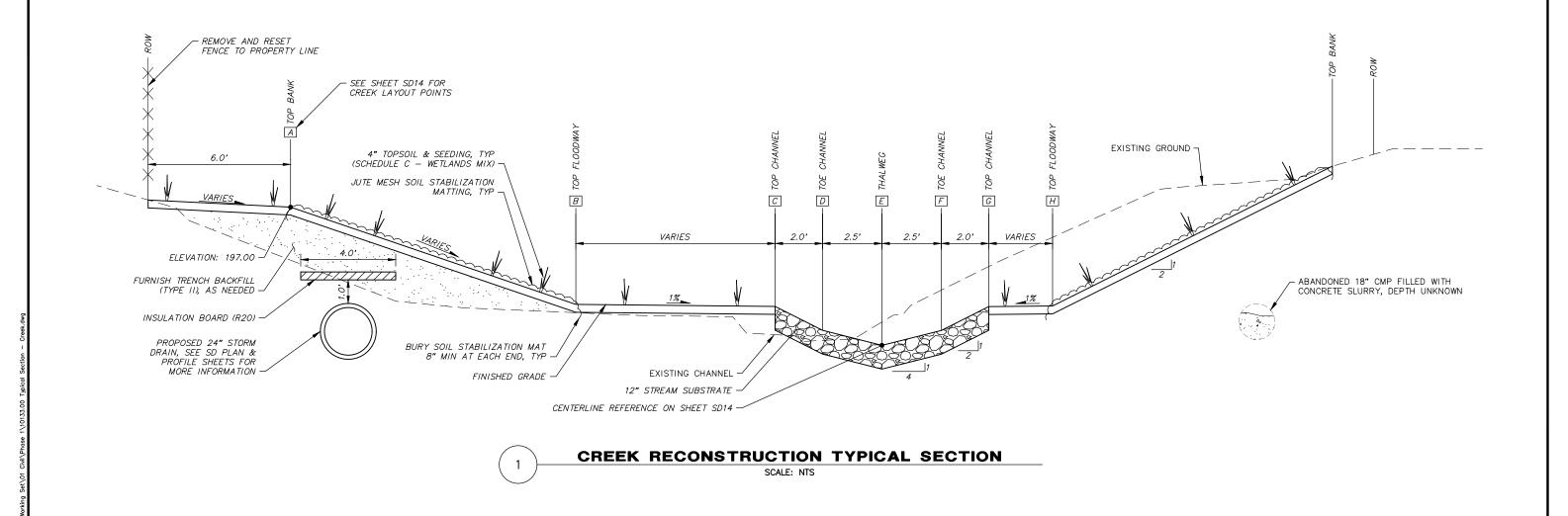
4-50 IMAGE DRIVE / REFLECTION DRIVE AREA SCHED

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

CREEK DIVERSION PLAN

SCALE HOR. 1"=10' GRID SW1638, SW1738 SD13 STATUS 95% SHEET Of SD15





AAB 66 See page D-24 of the MOA Benchmark Book 238.1

AAB 96 See page D-26 of the MOA Benchmark Book 313.

SIS OF THIS DATUM GAAB 1972 ADJUST

CRW
ENGINEERING GROUR LLC

Robert W. Burdick CE-123959

1. DATA PROVIDED BY: _

DATA TRANSFER CHECKED BY: ___

CONTRACTOR:

COMPANY: _

THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED.

3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED.

__ DATE: __

_ DATE:

| 15 MJ | 15 MJ | 17 MJ | 17 MJ | 18 M

PROJECT MANAGEMENT AND ENGINEERING

DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

CREEK RECONSTRUCTION

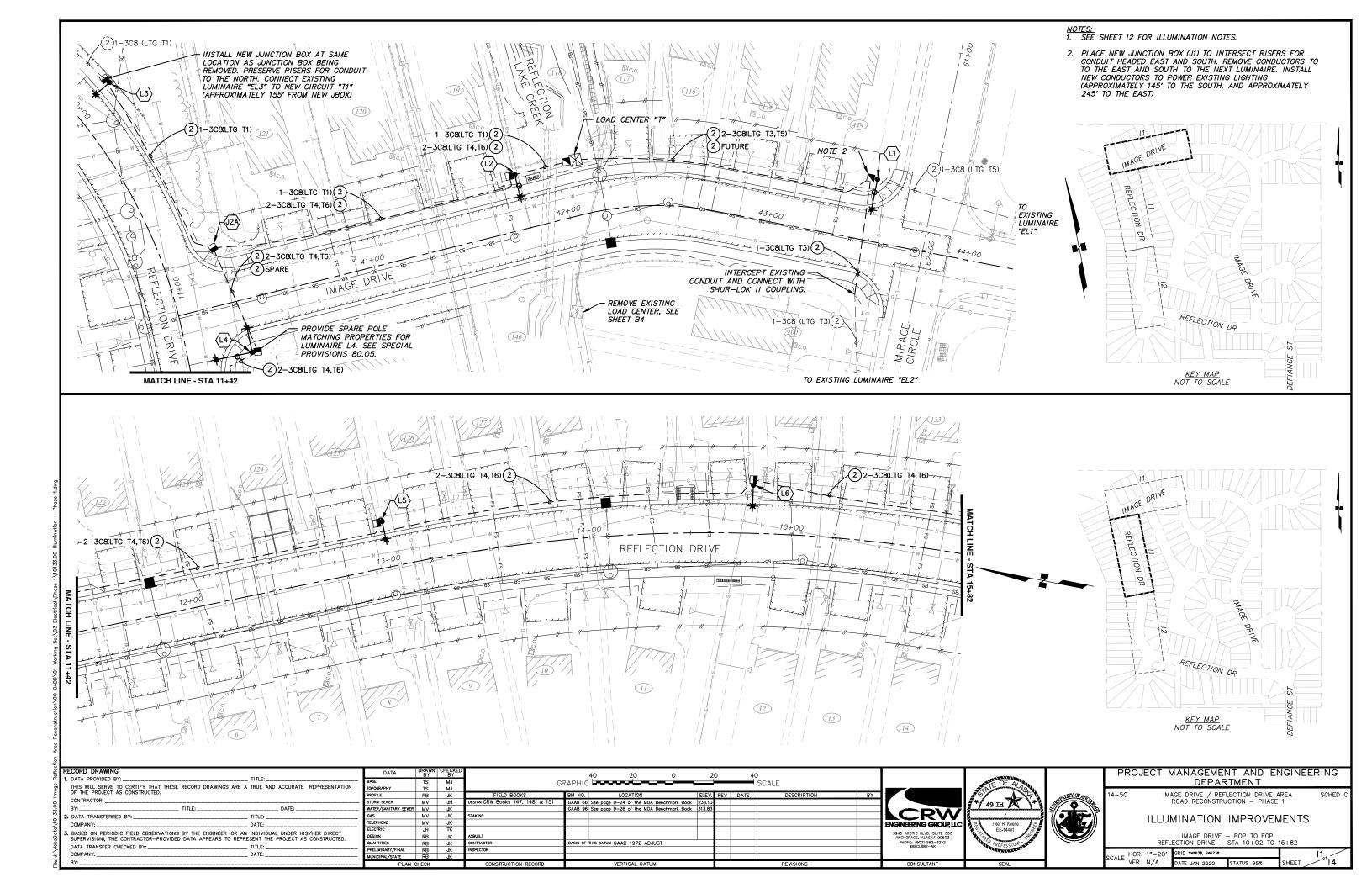
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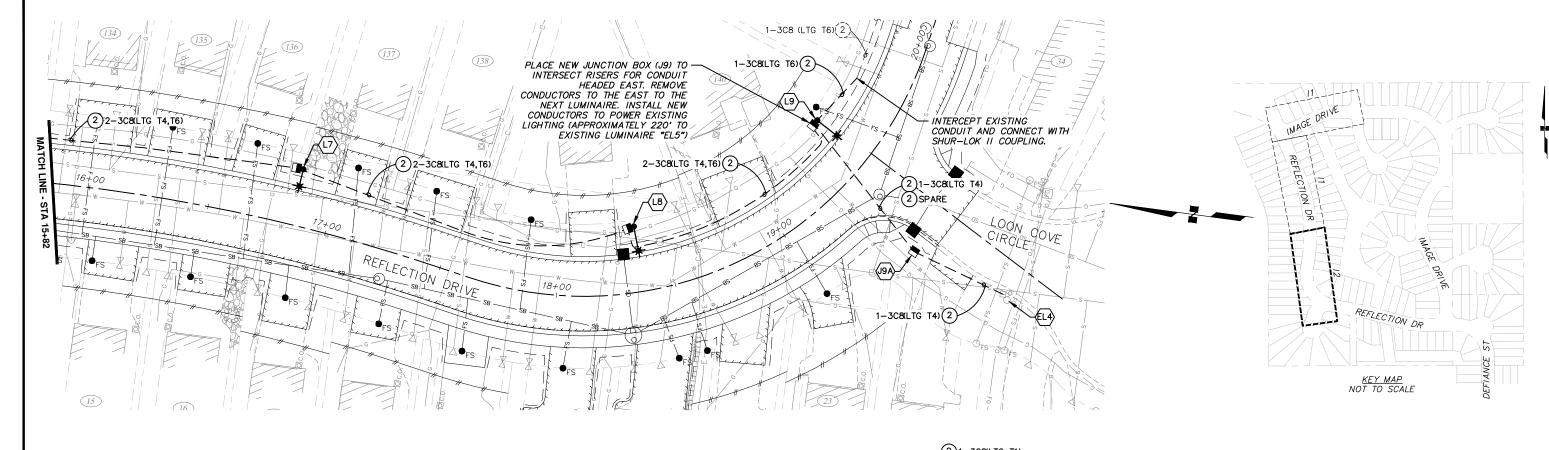
DATE JAN 2020 STATUS 95%

SD15 SHEET SD15

GRID SW1638, SW1738

SCALE HOR. N/A





- CIRCUIT # CONDUIT SIZE # OF CABLES -TYPE OF # OF CONDUCTORS L SIZE OF CONDUCTORS PER CABLE NEW CONDUIT/CONDUCTOR TAG

- CIRCUIT # CONDUIT SIZE - TYPE OF # OF CABLES -CIRCUIT # OF CONDUCTORS PER CABLE -SIZE OF CONDUCTORS

> EXISTING CONDUIT/ **NEW CONDUCTOR TAG**

- ILLUMINATION NOTES:

 1. PROVIDE HOT DIP GALVANIZED STEEL POLES WITH MAST ARMS PER MOA STANDARDS DETAIL 80-19 AND 80-20, RESPECTIVELY.
- 2. ALL LUMINAIRE POLE FOUNDATIONS SHALL BE DRIVEN PILE UNLESS
 OTHERWISE NOTED ON THE DRAWINGS. PILE EMBEDMENT DEPTH SHALL BE
 25' MINIMUM. LUMINAIRE POLE FOUNDATION SHALL BE LOCATED A
 MINIMUM OF 3 FEET FROM BACK OF SIDEWALK/PATHWAY OR A MINIMUM
 OF 7 FEET FROM BACK OF CURB. WHEN POLE LOCATION IS WITHIN 10' OF
 A UTILITY, EXCAVATE A HOLE TO 12" BELOW ANTICIPATED UTILITIES DEPTH WITH A VACTOR TRUCK BEFORE DRIVING PILE. SEE MASS DETAIL 80-13. CONTRACTOR SHALL STAKE LUMINAIRE POLE LOCATIONS IN THE FIELD FOR ENGINEERS REVIEW AND APPROVAL PRIOR TO INSTALLATION
- 3. INSTALL THE POLES WITH FIXED BASES PER MOA DETAIL 80-21.
- 4. LUMINAIRES APPROVED FOR SUBSTITUTION SHALL PROVIDE THE LIGHT LEVELS AND UNIFORMITIES INDICATED IN THE LIGHT LEVELS TABLE.
- 5. PROVIDE THE POLE SHAFT LENGTHS AND MAST ARM LENGTHS SHOWN IN THE ROADWAY LUMINAIRE SCHEDULE.
- 6. PROVIDE RIGID METAL CONDUIT (RMC) WITH A BARE, STRANDED #8 AWG COPPER GROUND FOR ALL RACEWAYS.
- 7. PROVIDE ONE SPARE 2" RMC WITH PULL ROPE BETWEEN THE JUNCTION BOXES ADJACENT TO EVERY ROAD CROSSING.
- 8. PROVIDE A 3 CONDUCTOR CABLE FOR EACH BRANCH CIRCUIT. SIZE AS SHOWN ON THE DRAWINGS.
- 9. INSTALL THE JUNCTION BOX WITHIN 3' OF THE POLE OR LOAD CENTER. DO NOT INSTALL JUNCTION BOXES IN SIDEWALKS, PATHWAYS, TRAILS, OR DRAINAGE DITCHES. JUNCTION BOXES INSTALLED BEHIND SIDEWALKS, PATHWAYS OR TRAILS SHALL HAVE A MINIMUM SETBACK OF 2' AND BE PLACED BEHIND OR ON THE DOWN TRAFFIC SIDE OF FOUNDATIONS.
- 10. IN THE DRAWINGS, EACH JUNCTION BOX HAS THE SAME IDENTIFYING NUMBER AS THE LIGHT POLE OR LOAD CENTER NEXT TO IT. FOR JUNCTION BOXES LOCATED BETWEEN POLES, THE IDENTIFYING NUMBER INCLUDES THE SMALLER OF THE TWO POLE NUMBERS BETWEEN WHICH THE JUNCTION BOX IS LOCATED AND AN "A" SUFFIX.

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PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

ILLUMINATION IMPROVEMENTS

REFLECTION DRIVE - STA 15+82 TO EOP

CALE	HOR.	1"=20'	GRID SW1638, SW1738		12./
JALE	VER.	N/A	DATE JAN 2020	STATUS 95%	SHEET / 14

NOTES:

- 1. MOA REQUIREMENTS ARE FROM 2007 DCM CHAPTER 5 FOR A LOCAL ROADWAY WITH LOW PEDESTRIAN CONFLICT (MEDIUM DENSITY RESIDENTIAL).
- 2. LIGHT LOSS FACTOR (LLF) = 0.93.
- 3. MOUNTING HEIGHTS ARE 30'.

	LUMINAIRE DEFINITION										
TYPE	SYMBOL	MAKE	MODEL	LUMENS	CCT*	DISTRIBUTION	VOLTAGE	DRIVE CURRENT	COLOR	OPTIONS	MOUNT
ROADWAY	• *	CREE	LEDWAY	SEE LUMINAIRE SCHEDULE	4000K	MEDIUM, TYPE 2	240	525mA	SILVER	7-PIN RECEPTACLE, BACKLIGHT SHIELD	MAST ARM

*CCT = CORRELATED COLOR TEMPERATURE

		ROA	DWAY LUM	IINAIRE SCH	IEDULE		
POLE	STATION	OFFSET	SHAFT LENGTH	MAST ARM LENGTH	LUMENS	DISTRIBUTION	CIRCUIT
L1	43+45.2	30.81 LT	26'	14'	12,000	MEDIUM, TYPE 2	T3
L2	41+83.1	27.43 LT	26'	10'	9,000	MEDIUM, TYPE 2	T1
L3	09+99.2	22.86 LT	28'	8'	6,000	MEDIUM, TYPE 2	T1
L4	11 . 70 E	1+38.5 31.76 LT	27'	11'*	6,000	MEDIUM, TYPE 2	T4
L4	11+36.5		27	17'	9,000	MEDIUM, TYPE 2	14
L5	13+00.5	22.85 LT	28'	8'	9,000	MEDIUM, TYPE 2	T4
L6	14+80.4	24.37 LT	28'	9'	15,000	MEDIUM, TYPE 2	T4
L7	16+84.9	23.60 LT	29'	6'	12,000	MEDIUM, TYPE 2	T4
L8	18+37.0	27.32 LT	28'	9'	6,000	MEDIUM, TYPE 2	T4
L9	19+48.7	26.59 LT	28'	9'	9,000	MEDIUM, TYPE 2	T4
NOTES:							
	1] * = NORTH						
	2] ALL LUMINAIRE	PILE FOUNDATIO	NS SHALL HAVI	E A MINIMUM EM	BEDMENT DEF	'TH OF 25'.	
	[3] PROVIDE A SPA	RE POLE WITH TH	HE SAME CHAR	ACTERISTICS AS	POLE L4.		

EXISTING ROADWAY LUMINAIRE SCHEDULE									
POLE	STATION	OFFSET	CIRCUIT						
EL1	44+88.6	21.43 LT	T5						
EL2	63+06.0	19.25 RT	T3						
EL3	08+48.8	20.53 LT	T1						
EL4	30+81.9	14.34 RT	T4						
EL5	21+70.5	23.20 LT	T6						

	JUNCTION BOX SCHEDULE								
J-BOX TYPE CIRCUIT STATION OFFSET									
J2A 1A T1,T4 10+87.5 26.21 LT									
J9A 1A T4 30+38.9 21.66 RT									
NOTE: ONL			ASSOCIATED WITH						

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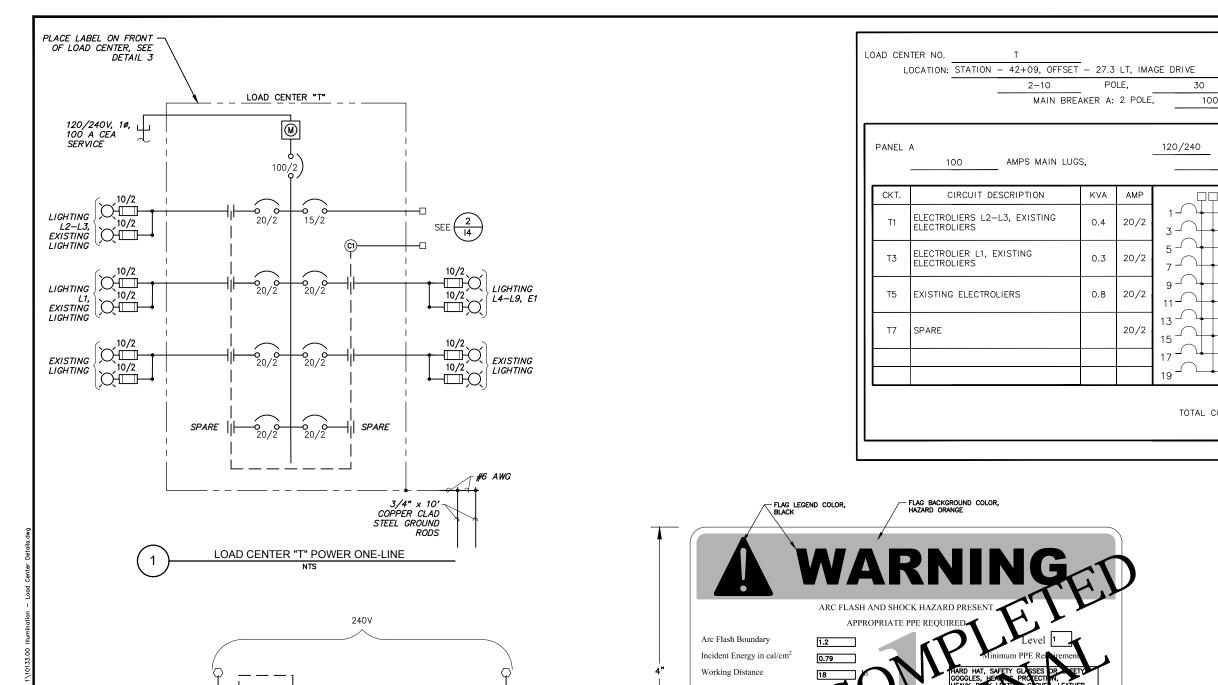


PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

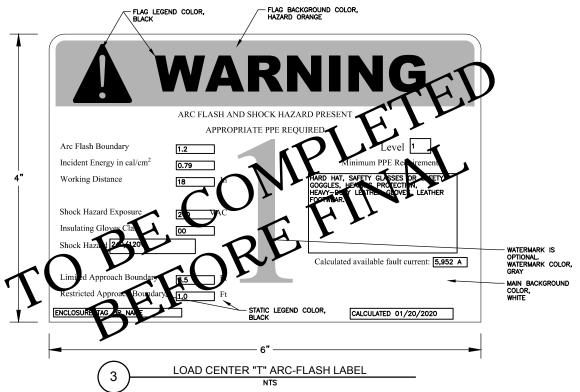
IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

ILLUMINATION SCHEDULES

GRID SW1638, SW1738 SCALE HOR. N/A DATE JAN 2020 STATUS 95%



CKT. CIRCUIT DESCRIPTION KVA AMP T1 ELECTROLIERS L2-L3, EXISTING D.4 20/2 T3 ELECTROLIERS L1, EXISTING D.3 20/2 T4 ELECTROLIERS D.4 20/2 T5 ELECTROLIERS L1, EXISTING D.3 20/2 T6 ELECTROLIERS L1, EXISTING D.3 20/2 T7 ELECTROLIERS L1, EXISTING D.3 20/2 T8 ELECTROLIERS L1, EXISTING D.3 20/2 T9 ELECTROLIERS L1, EXISTING D.3 20/2 T1 ELECTROLIERS L1, EXISTING D.3 20/2 T2 ELECTROLIERS L1, EXISTING D.3 20/2 T6 ELECTROLIERS L1, EXISTING D.3 20/2 T7 ELECTROLIERS L1, EXISTING D.3 20/2 T8 ELECTROLIERS L1, EXISTING D.3 20/2 ELECTROLIERS L1, EXISTING D.3			2-10 MAIN BRE	_)LE, 2 POLE	30 , 10		CONTAC S, 240			
CKT. CIRCUIT DESCRIPTION KVA AMP T1 ELECTROLIERS L2-L3, EXISTING ELECTROLIERS 0.4 20/2 3 4 15/2 0.2 PHOTOELECTRIC CONTROL T3 ELECTROLIERS 0.3 20/2 7 8 8 20/2 0.8 ELECTROLIERS L4-L9, E1 T2 T5 EXISTING ELECTROLIERS 0.8 20/2 13 14 14 15 16 16 17 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19											
CKT. CIRCUIT DESCRIPTION KVA AMP T1 ELECTROLIERS L2-L3, EXISTING D.4 20/2 3 4 15/2 0.2 PHOTOELECTRIC CONTROL TZ T3 ELECTROLIER L1, EXISTING D.3 20/2 7 8 20/2 0.8 ELECTROLIERS L4-L9, E1 TZ T5 EXISTING ELECTROLIERS T7 SPARE 20/2 13 14 20/2 SPARE 17 SPARE 20/2 15 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	PANEL	A				120/240			SINGLE	PHASE 3	WIRE
T1 ELECTROLIERS L2-L3, EXISTING		AM	MPS MAIN LU	GS,			10,00	10		AMPS INTERRUPT CAPACITY	
T1 ELECTROLIERS	CKT.	CIRCUIT DESCR	IPTION	KVA	AMP	_ Pi		AMP	KVA	CIRCUIT DESCRIPTION	CK.
T3 ELECTROLIERS	T1		EXISTING	0.4	20/2	3-		15/2	0.2	PHOTOELECTRIC CONTROL	T2
T5 EXISTING ELECTROLIERS 0.8 20/2 11 12 20/2 0.3 EXISTING ELECTROLIERS TE 20/2 SPARE 20/2 SPARE 17 18 18	Т3		ΓING	0.3	20/2			20/2	0.8	ELECTROLIERS L4-L9, E1	T4
77 SPARE 20/2 15 16 20/2 SPARE 17 18 18	T5	EXISTING ELECTROLIER	S	0.8	20/2			20/2	0.3	EXISTING ELECTROLIERS	T6
	Т7	SPARE			20/2			20/2		SPARE	
19 20											
						19	20				



	VOLTAGE DROPS										
CIRCUIT	SIZE	LENGTH	VOLTAGE	CURRENT	V.D.						
T1	#8 AWG	446	240V	1.58	0.43%						
Т3	#8 AWG	440	240V	1.2	0.32%						
T4	#8 AWG	1047	240V	3.51	2.23%						
T5	#8 AWG	1748	240V	3.19	3.38%						
T6	#8 AWG	2039	240V	1.45	1.79%						

LOAD CENTER NOTES:

1. LABELS FOR LOAD CENTERS SHALL HAVE
SUFFICIENT DURABILITY TO WITHSTAND THE
ENVIRONMENT INVOLVED. CONTACT ENGINEER
PRIOR TO ORDER OF PLACARD TO VERIFY MAXIMUM FAULT CURRENT.

2. LABEL THE FRONT WITH 3M SCOTCH CAL REFLECTIVE DECALS NOTING OWNERSHIP: MOA, PURPOSE: LU (ILLUMINATION) AND THE VOLTAGE.

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PHOTO CELL

MOUNT PHOTOCELL ON A 3/4"Ø, 18" RMC RISER ON TOP OF LOAD CENTER -

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SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83			
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С	JH	TK							
	RB	JK	ASBUILT						
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2-10P, 30A CONTACTORS 240V COIL

SELECTOR SWITCH

LOAD CENTER LIGHTING CONTROL SCHEMATIC





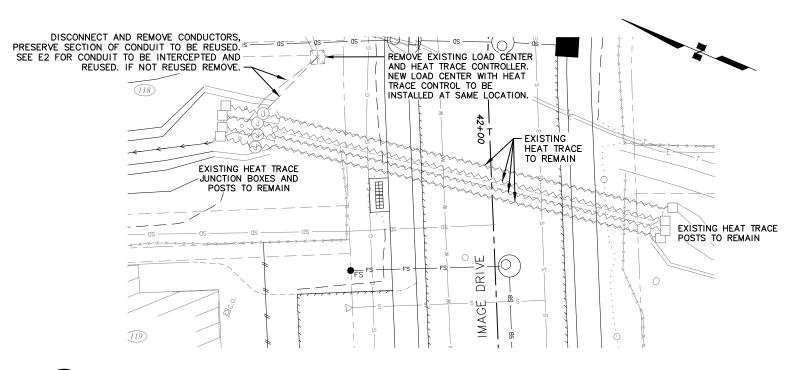


PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

POWER ONE-LINE, PANEL SCHEDULE, AND CONTROL SCHEMATIC

GRID SW1638, SW1738 SCALE HOR. N/A DATE JAN 2020



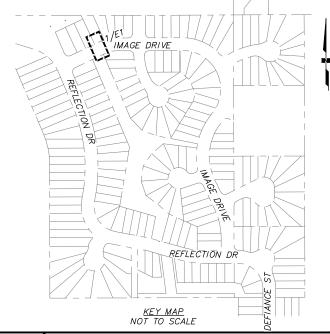
UNDERGROUND CONDUIT HEAT TRACE J ABOVE GRADE JUNCTION BOX ELECTRIC JB TYPE IA ELECTRIC JB TYPE II \mathbb{X} LOAD CENTER HEAT TRACE END KIT CONDUIT SIZE -- CIRCUIT # - TYPE OF CIRCUIT # OF CABLES -# OF CONDUCTORS L SIZE OF CONDUCTORS PER CABLE NEW CONDUIT/CONDUCTOR TAG CIRCUIT # CONDUIT SIZE -TYPE OF # OF CABLES -/ CIRCUIT # OF CONDUCTORS SIZE OF CONDUCTORS PER CABLE -EXISTING CONDUIT/ NEW CONDUCTOR TAG

ELECTRICAL PLAN LEGEND

EXISTING

HEAT TRACE DEMOLITION PLAN

SCALE: SEE GRAPHIC SCALE



PROJECT MANAGEMENT AND ENGINEERING 20 SCALE 20 10 GRAPHIC 1. DATA PROVIDED BY: _ BASE TS MJ

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FOROTLE RB JK

STORM SEWER MV JH

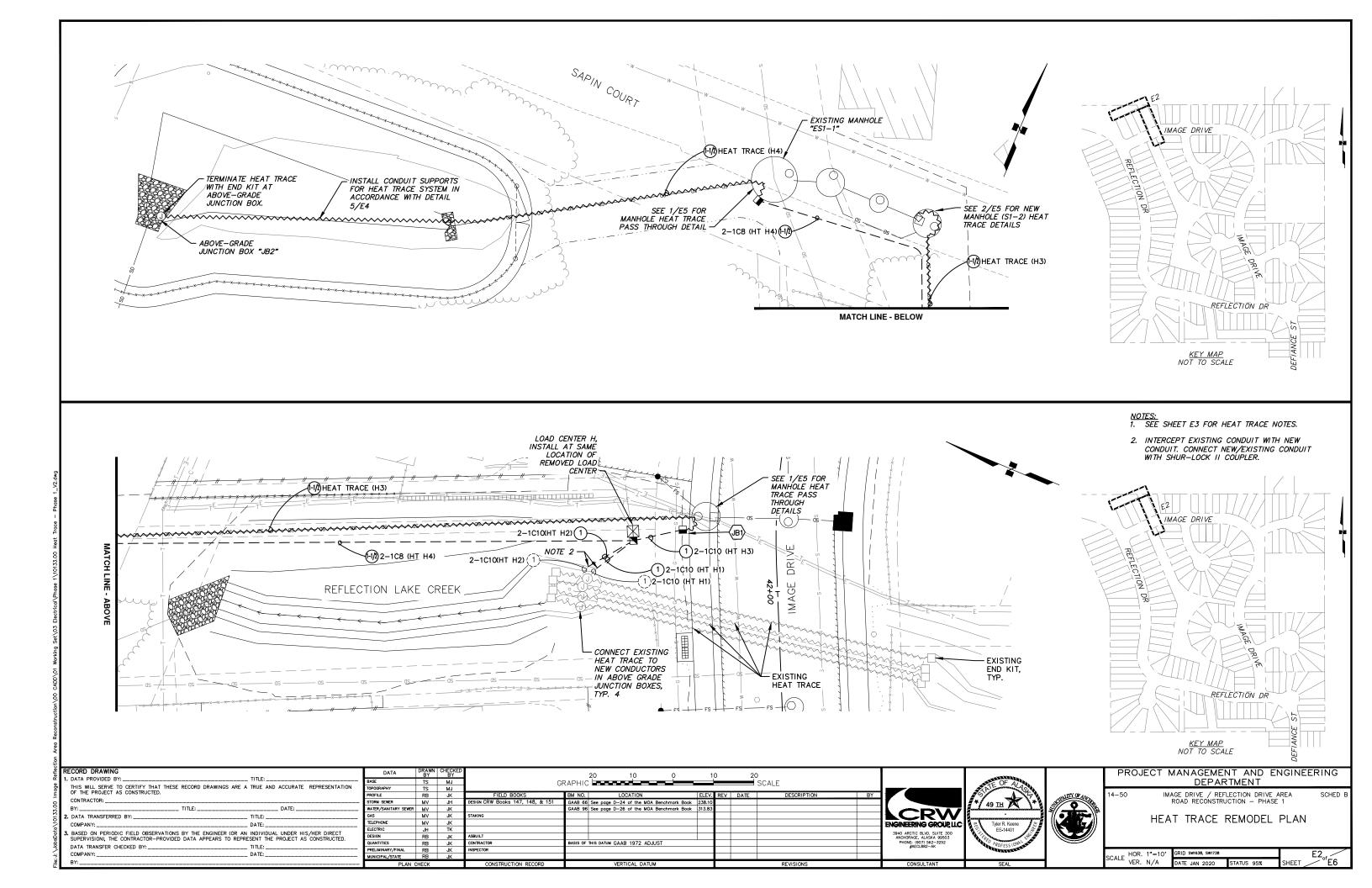
MATER/SANITARY SEWER MV

JK

TELEPHONE MV

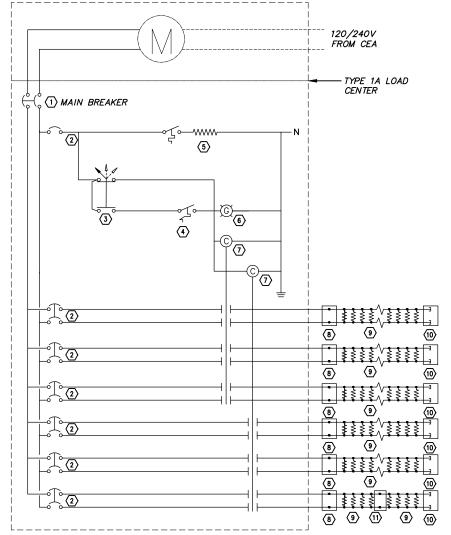
T DEPARTMENT THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. LOCATION IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1 CONTRACTOR: SAAB 66 See page D-24 of the MOA Benchmark Book 238.10 CRW
ENGINEERING GROUPLLC AAB 96 See page D-26 of the MOA Benchmark Book 313.8 2. DATA TRANSFERRED BY: ___ HEAT TRACE DEMOLITION PLAN COMPANY: _ _ DATE: _ 3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK SIS OF THIS DATUM GAAB 1972 ADJUST DATA TRANSFER CHECKED BY: ___ GRID SW1638, SW1738 HOR. 1"=10' DATE: VER. N/A DATE JAN 2020 STATUS 95%

(VO CADD (VI WORKING SEL (VS Electrical (Fridse I (10153:00 Heat Indee - Fridse I.



HEAT TRACE CONSTRUCTION NOTES

- PROVIDE A HEAT TRACE CONTROLLER IN THE LOAD CENTER ENCLOSURE AT EACH LOCATION INDICATED ON THE DRAWINGS. INSTALL THE ENCLOSURE WITH THE DOOR FACING THE ADJACENT STREET.
- INSTALL RIGID STEEL CONDUIT WITH A #8 AWG EQUIPMENT GROUNDING CONDUCTOR AND TWO XHHW-2 CONDUCTORS FOR EACH HEAT TRACE CIRCUIT BETWEEN THE CONTROLLER ENCLOSURE AND THE SERVING JUNCTION BOX. SIZE CONDUCTORS AND CONDUIT AS SHOWN ON THE
- PROVIDE SEAL-OFF FITTINGS IN THE SERVING JUNCTION BOX ON THE CONDUITS THAT ENTER THE CULVERTS. PIPES. AND MANHOLES.
- INSTALL HEAT TRACE CAUTION SIGNS, PER DETAIL 3/E4, AT EACH MANHOLE AND PIPE OUTFALL. EMBED MARKERS 24" IN SOIL.
- INSTALL HEAT TRACE CONDUIT IN PIPES PER DETAILS 2/E4.
- PROVIDE COMPLETED HEAT TRACE INSTALLATION RECORD (SEE MANUFACTURER'S INSTALLATION GUIDE FOR FORM) FOR FINAL ACCEPTANCE OF ALL HEAT TRACE RUNS.



NOTE: GENERAL DETAIL, NUMBER OF CIRCUITS AND BREAKER SIZE MAY VARY. SEE PLAN DRAWINGS &

LOAD CENTER CONTROL SCHEMATIC

___ DATE: _

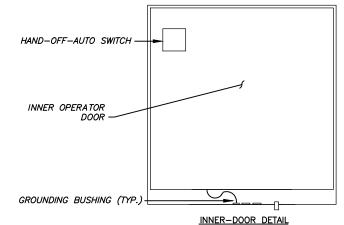
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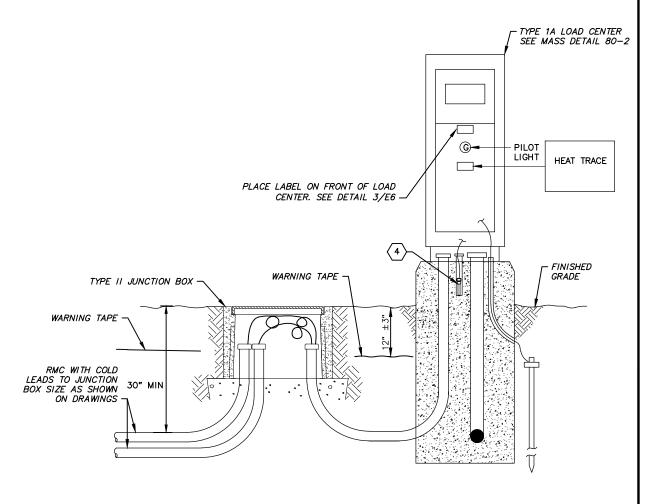
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HEAT TRACE CONTROLLER MATERIALS LIST

- (1) 2 POLE MAIN CIRCUIT BREAKER, SIZE AS SHOWN IN THE PANEL SCHEDULE.
- (2) 15/1 CONTROL BREAKER AND CLASS B GROUND FAULT CIRCUIT INTERRUPTERS FOR HEAT TRACE CIRCUITS. HEAT TRACE CIRCUIT SIZES AS SHOWN IN THE PANEL SCHEDULE.
- \bigcirc SELECTOR SWITCH: SINGLE POLE 3 POSITION WITH CONTACTS RATED 10 AMPS AT 120 VOLTS. LABEL THE SWITCH "HEAT TRACE CONTROL" AND THE SWITCH POSITIONS H= "ON", O= "OFF", A= "THERMOSTAT"
- REMOTE BULB THERMOSTAT: OPEN ON RISE, SPDT REMOTE BULB THERMOSTAT. WHITE RODGERS "1687-9" OR EQUAL.
- (5) ENCLOSURE HEATER: 800W THERMOSTATICALLY CONTROLLED 120V FAN-DRIVEN HEATER. HOFFMAN "D-AH8001B" OR FQUAL.
- 6 PILOT LIGHT: 120 VOLT LIGHT EMITTING DIODE LAMP WITH GREEN LENS, NEMA 4X RATED IN OUTER DOOR OF ENCLOSURE. LABEL "HEAT TRACE ON". PROVIDE A SPARE LAMP.
- (7) CONTACTOR: PROVIDE 60A CONTACTOR (NUMBER OF POLES AND CONTACTORS AS SHOWN IN LOAD CENTER SCHEDULE) WITH CONTACTS RATED 60 AMPS RESISTIVE AT 240 VOLTS AND A 120 VOLT CONTROL COIL.
- (8) SPLICE KIT: POWER TO HEAT TRACE CABLE, LISTED FOR WET LOCATIONS. INSTALL PER HEAT TRACE MANUFACTURER'S RECOMMENDATIONS.
- (9) HEAT TRACE CABLE: SELF-REGULATION LONG LINE TYPE LISTED FOR CLASS I, DIVISION 2 USE AND RATED AT 10 WATTS/FOOT AT 240 VOLTS. NELSON LT210-J OR EQUAL.
- (10) HEAT TRACE END KIT PER MANUFACTURER.



- LOAD CENTER NOTES: PLACARDS FOR LOAD CENTERS SHALL HAVE SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT
 - INVOLVED. CONTACT ENGINEER PRIOR TO ORDER OF PLACARD FOR MAXIMUM FAULT CURRENT
 - 2. LABEL THE FRONT WITH 3M SCOTCH CAL REFLECTIVE DECALS NOTING OWNERSHIP: MOA, PURPOSE: TH (THAW WIRE) AND THE VOLTAGE.
 - 3. PROVIDE ARC FLASH WARNING LABELS WITH INCIDENT ENERGY VALUES AND PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS ON EACH PIECE OF EQUIPMENT IN ACCORDANCE WITH NEC ARTICLE 110.16 AND NFPA 70E.



HEAT TRACE LOAD CENTER 2

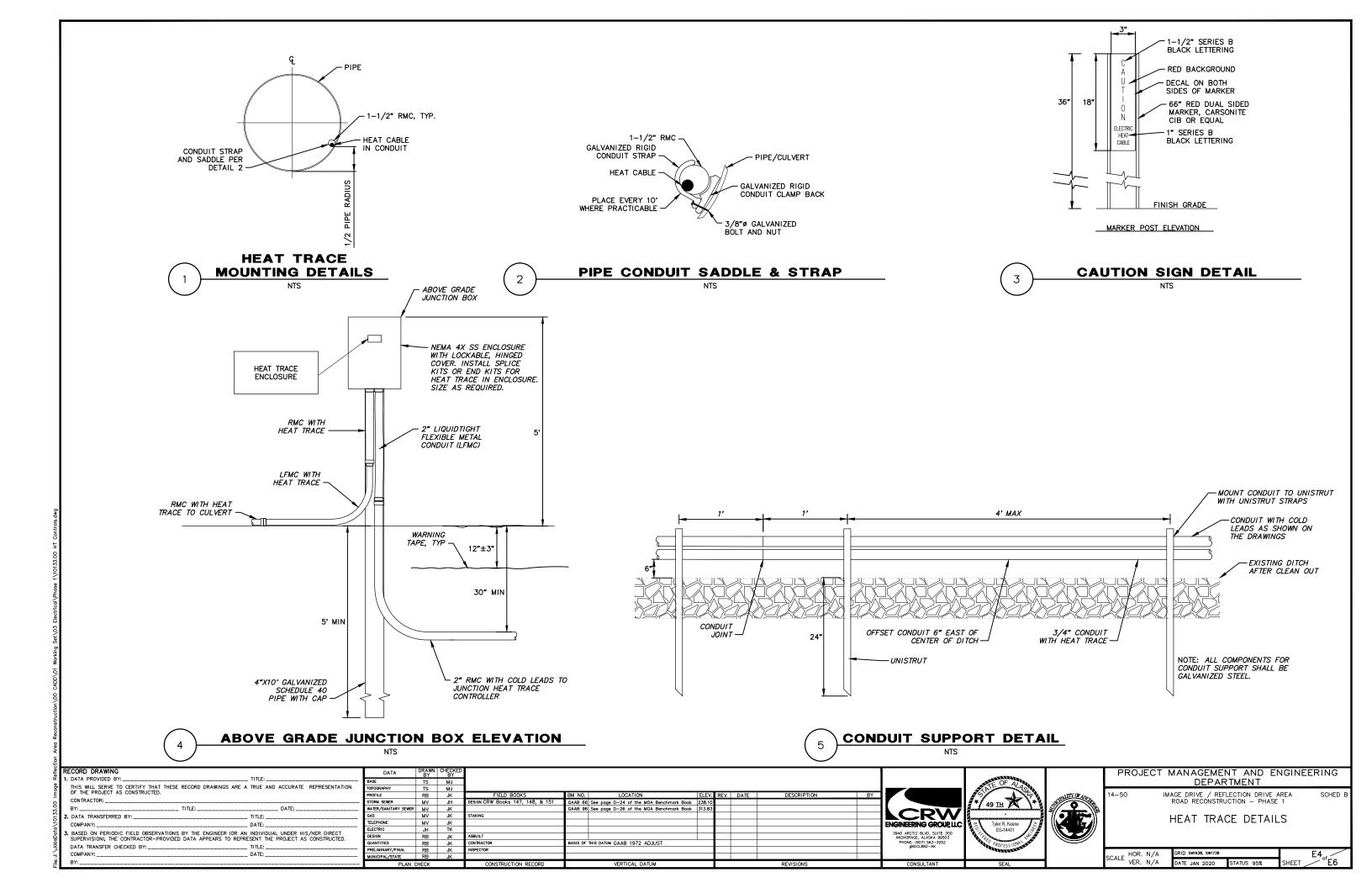
MJ AB 66 See page D-24 of the MOA Benchmark Book AB 96 See page D-26 of the MOA Benchmark Book CRW ENGINEERING GROUP LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK IS OF THIS DATUM GAAB 1972 ADJUST

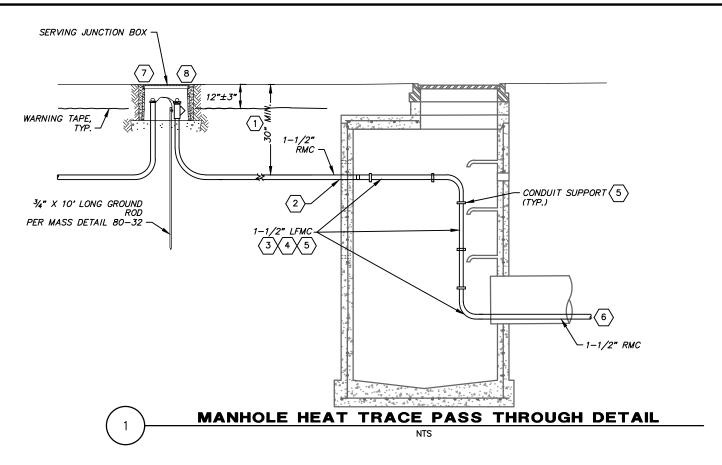
PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

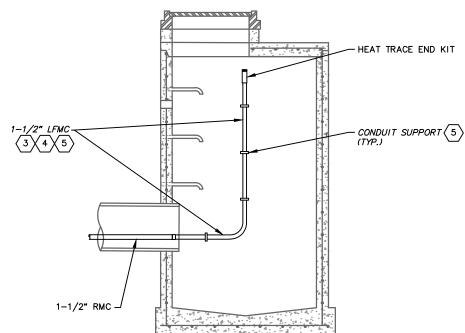
HEAT TRACE CONTROLS SCHEMATIC & DETAILS

E3_{of} E6 RID SW1638, SW1738 HOR, N/A

RECORD DRAWING . DATA PROVIDED BY: THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: DATA TRANSFERRED BY: _ COMPANY: . BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: __







MANHOLE "S1-2" HEAT TRACE DETAIL 2

RECORD DRAWING 1. DATA PROVIDED BY: _ THIS WILL SERVE TO CERTIFY THAT THESE RECORD DRAWINGS ARE A TRUE AND ACCURATE REPRESENTATION OF THE PROJECT AS CONSTRUCTED. CONTRACTOR: ___ 2. DATA TRANSFERRED BY: ___ __ DATE: __ COMPANY: 3. BASED ON PERIODIC FIELD OBSERVATIONS BY THE ENGINEER (OR AN INDIVIDUAL UNDER HIS/HER DIRECT SUPERVISION), THE CONTRACTOR-PROVIDED DATA APPEARS TO REPRESENT THE PROJECT AS CONSTRUCTED. DATA TRANSFER CHECKED BY: ___ DATE:

DATA	DRAWN BY	CHECKED									
BASE	TS	MJ									1
TOPOGRAPHY	TS	MJ									_
PROFILE	RB	JK	FIELD BOOKS	BM NO.	LOCATION	ELEV.	REV	DATE	DESCRIPTION	BY	
STORM SEWER	MV	JH	DESIGN CRW Books 147, 148, & 151	GAAB 66	See page D-24 of the MOA Benchmark Book	238.10					17
WATER/SANITARY SEWER	MV	JK		GAAB 96	See page D-26 of the MOA Benchmark Book	313.83					11
GAS	MV	JK	STAKING								
TELEPHONE	MV	JK									ENG
ELECTRIC	JH	TK									
DESIGN	RB	JK	ASBUILT								394 A
QUANTITIES	RB	JK	CONTRACTOR	BASIS OF	THIS DATUM GAAB 1972 ADJUST						1
PRELIMINARY/FINAL	RB	JK	INSPECTOR								1
MUNICIPAL/STATE	RB	JK									1
PLAN (CHECK		CONSTRUCTION RECORD		VERTICAL DATUM				REVISIONS		

CRW GINEERING GROUP ILC





PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION - PHASE 1

MANHOLE HEAT TRACE DETAILS

GRID SW1638, SW1738 E5_{of}E6 HOR. N/A DATE JAN 2020

MANHOLE HEAT TRACE CONSTRUCTION NOTES

1 INSTALL RIGID METAL CONDUITS (RMC) A MINIMUM OF 30 INCHES BELOW FINISHED GRADE.

(2) CORE DRILL SEPARATE CONDUIT ACCESS HOLES FOR EACH CONDUIT THROUGH THE MANHOLE WALL AND GROUT AROUND THE INSTALLED CONDUIT.

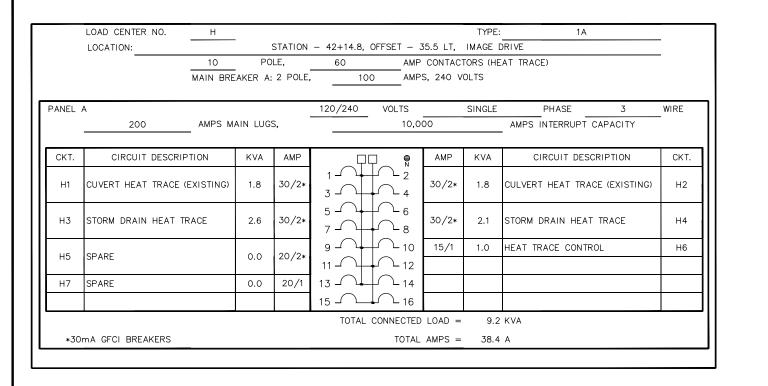
PROVIDE 1-1/2" LIQUID-TIGHT FLEXIBLE METAL CONDUITS (LFMC) INSIDE THE MANHOLE. PROVIDE LFMC FITTINGS ON BOTH ENDS OF ALL SEGMENTS OF LFMC.

6 PROVIDE 1-1/2" RMC WITH HEAT TRACE IN THE STORM DRAIN PIPES, EXTENDING THEM TO THE LOCATION(S) SHOWN IN THE DRAWINGS.

7 PROVIDE TYPE 2 OR TYPE 1A JUNCTION BOXES WITH GROUND ROD, GROUNDING BUSHINGS, AND GROUNDING PER MASS DETAIL 80-32 OR 80-31 AS SHOWN ON THE PLANS.

(8) COMPLETE SPLICES BETWEEN HOT AND COLD LEADS IN THE JUNCTION BOX AND PROVIDE SEALING FITTINGS ON THE RMC.

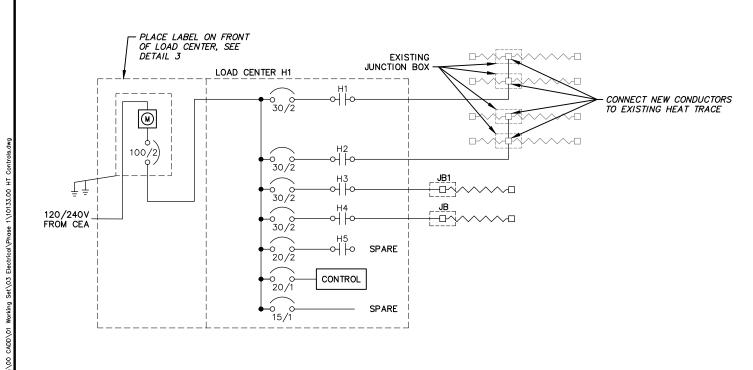
4 PROVIDE THE LFMC WITH A STAINLESS STEEL GROUND STRAP BETWEEN THE SECTIONS OF RMC. $\langle 5 \rangle$ ATTACH LFMC TO MANHOLE WALL ON 2.5' CENTERS.

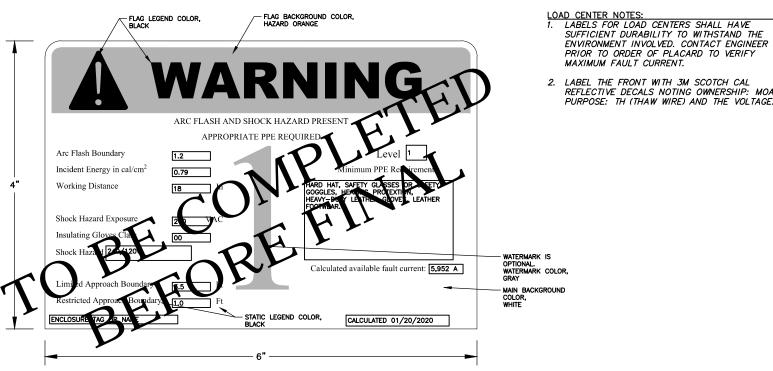


	JUNCTION BOX TABLE									
	TAG	TYPE	CIRCUITS	STATION	OFFSET					
	JBE	EXISTING ABOVE GRADE JUNCTION BOX	Н3	42+15.0	23.2 LT					
I	JB1	TYPE 1A	Н3	42+15.0	23.2 LT					

	NEW HEAT TRACE TABLE							
	CIRCUIT	FROM	ТО	LENGTH				
l	Н3	JB1	S1-2	230				
	H4	ES1-1	JB2	186				

	VOLTAGE	DROP TA	ABLE	
CIRCUIT	CONDUCTOR SIZE (AWG)	LENGTH (FT)	CURRENT (AMPS)	V.D.
H1	10	20	7.5	0.13%
H2	10	30	7.5	0.19%
Н3	8	15	10.6	0.09%
H4	8	175	8.6	0.83%





PRIOR TO ORDER OF PLACARD TO VERIFY MAXIMUM FAULT CURRENT.

2. LABEL THE FRONT WITH 3M SCOTCH CAL REFLECTIVE DECALS NOTING OWNERSHIP: MOA, PURPOSE: TH (THAW WIRE) AND THE VOLTAGE.

LOAD CENTER H1 POWER ONE-LINE

LOAD CENTER H1 ARC-FLASH LABEL

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DATE:

COMPANY:

TS MJ
TS MJ
RB JK
MV JH AB 96 See page D-26 of the MOA Benchmark Book SIS OF THIS DATUM GAAB 1972 ADJUST

CRW ENGINEERING GROUP ILC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 PHONE: (907) 562-3252 #AECL882-AK



PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT IMAGE DRIVE / REFLECTION DRIVE AREA ROAD RECONSTRUCTION — PHASE 1

HEAT TRACE LOAD CENTER SCHEDULE & ONE-LINE

GRID SW1638, SW1738 E6_{of}E6 HOR, N/A DATE JAN 2020